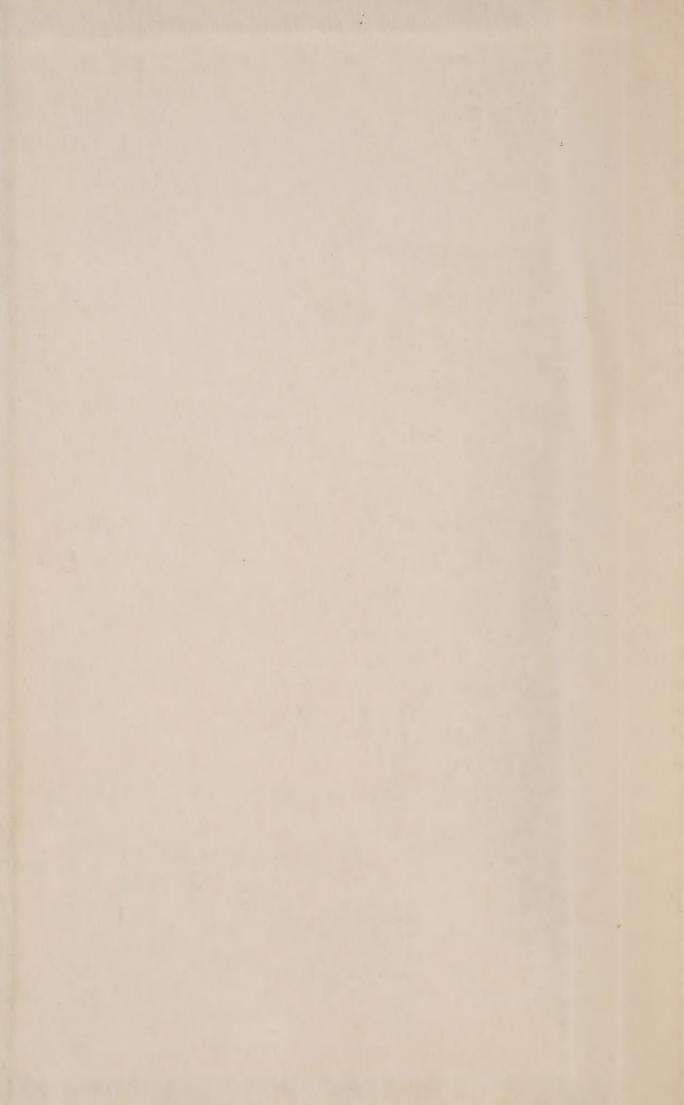
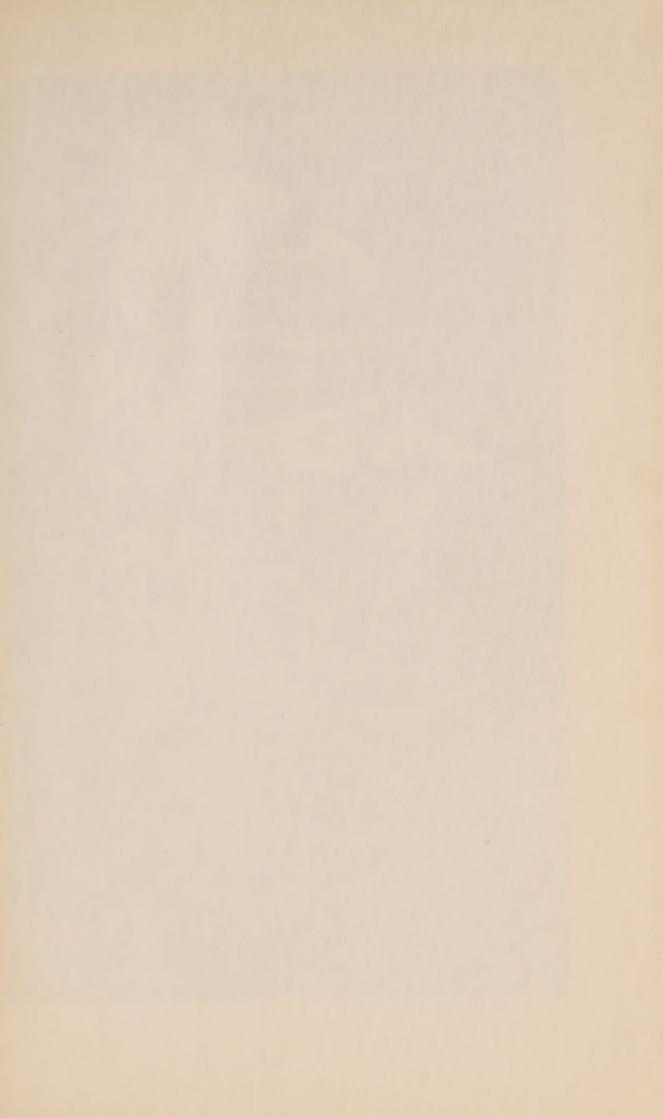
HELEN M. McCANN

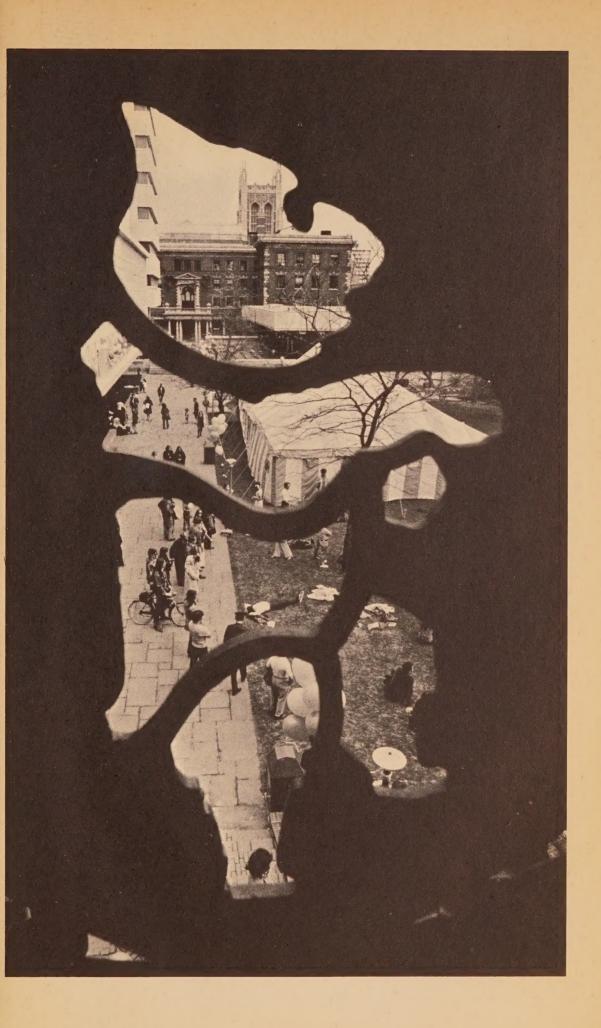


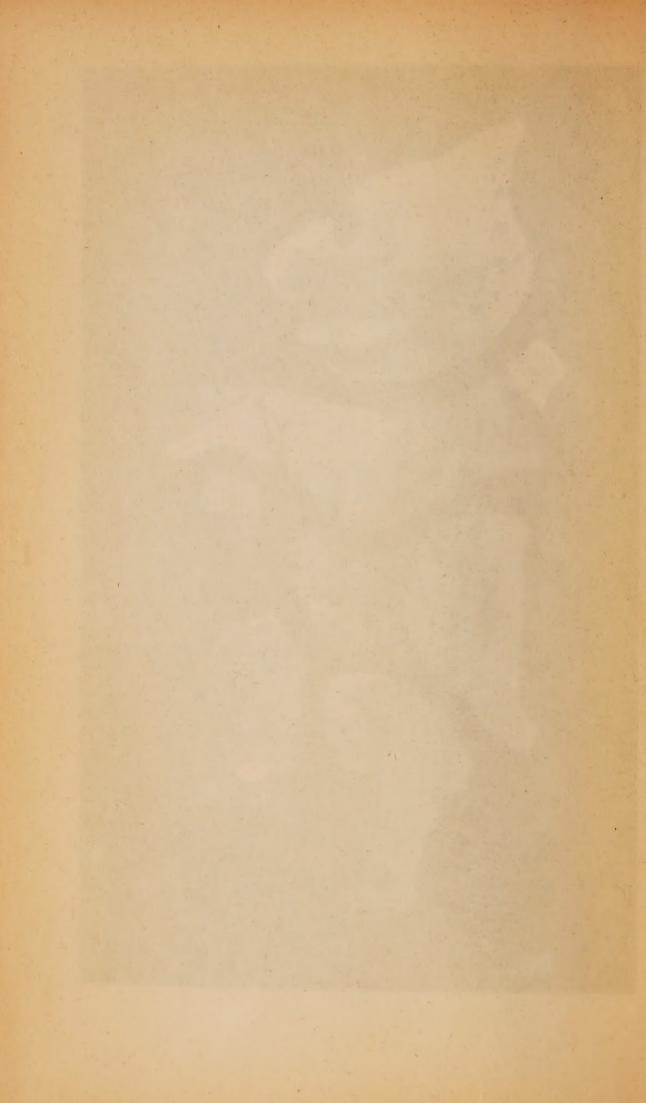


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THE UNDERGRADUATE COLLEGE

OF LIBERAL ARTS

FOR WOMEN

OF

Columbia University 1970—1971

MORNINGSIDE HEIGHTS NEW YORK, N. Y. 10027

COMMUNICATION WITH THE COLLEGE

The post office address is Barnard College, 606 West 120th Street, New York, N. Y. 10027. The telephone number is (Area Code 212) 280-1754.

Inquiries should be addressed as follows:

General matters pertaining to the College: OFFICE OF THE PRESIDENT

Academic work of students: CLASS ADVISERS

Admission to the freshman class or with advanced standing; information about financial aid for entering students; request for Announcements: DIRECTOR OF ADMISSIONS

Alumnae: DIRECTOR OF ALUMNAE AFFAIRS

Faculty and curriculum matters: OFFICE OF DEAN OF THE FACULTY

Financial aid and loan funds for students in college: DIRECTOR OF FINANCIAL AID

Gifts or bequests: DIRECTOR OF DEVELOPMENT

Health: COLLEGE PHYSICIAN

Housing: DIRECTOR OF RESIDENCE

Notice of withdrawal: DEAN OF STUDIES

Opportunities for self-help; recommendations for employment: OFFICE OF PLACEMENT AND CAREER PLANNING

Payment of College bills: BURSAR

Public relations: DIRECTOR OF PUBLIC RELATIONS

Requests for transcripts: REGISTRAR

Student Activities: DIRECTOR OF THE MILLICENT McINTOSH CENTER

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SEPTEMBER 1971

26 27 28 29 30



I. College Calendar 1970-1971

- Aug. 3 Monday. Last day for refund of Autumn Term deposit.
- Sept. 1 Tuesday. Final payments due, Autumn Term.
 - 21 Monday. Language Placement Examinations.
 - 22 Tuesday, and Sept. 23, Wednesday. Registration in person for Autumn Term. Deferred examinations for students absent from the May, 1970, final examinations.
 - 24 Thursday. Autumn Term, eighty-second year begins. Classes begin 9 a.m. Convocation, 1 p.m.
- Oct. 1 Thursday, and Oct. 2, Friday. Change of Program. Last day for adding a course, Autumn Term.
 - 23 Friday. Last day for filing diploma name cards for the degree in February, 1971.
 - 28 Wednesday. Award of October degrees.
- Nov. 3 Tuesday. Election Day. Holiday.
 - 11 Wednesday. Midterm date.
 - 24 Tuesday. Annual Thanksgiving Service in St. Paul's Chapel.
 - 26 Thursday, through Nov. 29, Sunday. Thanksgiving holidays.
- Dec. 1 Tuesday. Last day for refund of Spring Term deposit. Required meetings for planning programs.
 - 11 Friday. Last day for filing Spring Term programs, and for dropping a course, Autumn Term.
 - 19 Saturday, through Jan. 3, 1971, Sunday. Christmas holidays. Residence halls closed.
- Jan. 6 Wednesday, through Jan. 8, Friday. Major examinations for February graduates.
 - 15 Friday. Final payments due, Spring Term.
 - 17 Sunday. Annual Commemoration Service in St. Paul's Chapel.
 - 18 Monday. Midyear examinations begin.
 - 28 Thursday. Autumn Term ends.
 - 29 Friday. Language Placement Examinations.

- Feb. 1 Monday, and Feb. 2, Tuesday. Registration in person for Spring Term.
 - 3 Wednesday. Spring Term begins. Classes begin 9 a.m.
 - 4 Thursday. Convocation, 1 p.m.
 - 5 Friday. Last day for filing application for financial aid for 1971-72.
 - 11 Thursday, and Feb. 12, Friday. Change of Program. Last day for adding a course, Spring Term.
 - 19 Friday. Last day for filing diploma name cards for the degree in June, 1971.
 - 22 Monday. Washington's Birthday. Holiday.
 - 24 Wednesday. Award of February degrees.
- Mar. 3 Wednesday, through Mar. 5, Friday. Deferred examinations for students absent from the January, 1971, final examinations.
 - 26 Friday. Midterm date.
 - 27 Saturday, through Apr. 4, Sunday. Spring holidays.
- Apr. 9 Friday. Last day for dropping a course, Spring Term.
 - 20 Tuesday. Required meetings for planning programs.
 - 21 Wednesday, through Apr. 23, Friday. Major examinations for June and October graduates.
- May 7 Friday. Last day for filing Autumn Term programs and diploma name cards for the degree in October 1971.
 - 17 Monday. Final examinations begin.
 - 27 Thursday. Spring Term ends.
 - 30 Sunday. Baccalaureate Service.
- June 1 Tuesday. Conferring of degrees.
- Sept. 30 Thursday. Autumn Term, 1971, eighty-third year begins. Classes begin 9 a.m. Convocation, 1 p.m.

II. Organization

TRUSTEES OF BARNARD COLLEGE

WALLACE S. JONES, Chairman

FRANCIS T. P. PLIMPTON, Vice-Chairman

ROBERT L. HOGUET, Vice-Chairman

MRS. FRANK ALTSCHUL, Clerk

MRS. HUGH AUCHINCLOSS
HENRY CHAUNCEY
WALTER J. P. CURLEY, JR.
MRS. JOHN ELLIOTT, JR.
RICHARD M. FURLAUD
ARTHUR J. GOLDBERG
ROY M. GOODMAN
MRS. WILLIAM T. GOSSETT
MRS. IOLA S. HAVERSTICK
ROBERT S. HUTCHINS
MRS. ELIOT JANEWAY
WILLIAM A. MARSTELLER
PRESIDENT WILLIAM L. MC

PRESIDENT WILLIAM J. MCGILL, ex officio

SAMUEL R. MILBANK

MISS MARTHA PETERSON

MRS. SYDNEY S. SPIVACK

MISS BARBARA M. WATSON

MRS. FREDERICK J. WOODBRIDGE

MRS. TALCOTT BATES, Alumnae Trustee

MRS. LEWIS GOLDENHEIM, Alumnae Trustee

MRS. N. LAWRENCE HERRICK, Alumnae Trustee

MRS. HENRY C. PANNELL, Alumnae Trustee

MRS. OGDEN REID, Trustee Emeritus

MRS. ARTHUR H. SULZBERGER, Trustee Emeritus

Faculty Representatives to Meet with Trustees

PROFESSOR DAVID ROBERTSON, JR.

PROFESSOR JOANN MORSE

THE FACULTY OF BARNARD COLLEGE

- MARTHA PETERSON, 1967, President of Barnard College and Dean in the University
 A.B., M.A., Ph.D., Kansas; LL.D., L.H.D.
- LEROY C. BREUNIG, 1953, Dean of the Faculty and Professor of French A.B., DePauw; Ph.D., Cornell
- HELEN PHELPS BAILEY, 1 1933, Dean of Studies and Professor of French A.B., Barnard; M.A., Ph.D., Columbia
- BARBARA S. SCHMITTER, 1957, Associate Dean of Studies and Associate Professor of Psychology
 A.B., Nebraska; M.A., Columbia
- ALVIN L. ATKINS, 1966, Visiting Associate Professor of Psychology A.B., Yale; M.A., Ph.D., Columbia
- LANNY FIELDS, 1968, Visiting Assistant Professor of Psychology A.B., Ph.D., Columbia
- MARY R. HAAS, 1970, Virginia C. Gildersleeve Visiting Professor of Linguistics
- ADELBERT H. JENKINS, 1969, Visiting Assistant Professor of Psychology A.B., Antioch; M.A., Ph.D., Michigan
- THOMAS M. MESSER, 1965-66; 1970, Visiting Lecturer in Art History M.A., Harvard
- BRIAN O'DOHERTY, 1970, Visiting Lecturer in Art History
- HELEN H. BACON, 1 1961, Professor of Greek and Latin A.B., Ph.D., Bryn Mawr
- BERNARD BARBER, 1952, Professor of Sociology A.B., M.A., Ph.D., Harvard
- BARNETT F. BARON, 1970, Assistant Professor of Political Science A.B., New York University; Ph.D., Yale
- ANNETTE K. BAXTER, 1952, Associate Professor of History A.B., Barnard; M.A., Smith, Radcliffe, Ph.D., Brown

The dates refer to the beginning of service in the College and not necessarily to the assumption of the current title.

¹ Absent on leave, Spring Term.

- BRIGITTE L. BRADLEY, 1962, Associate Professor of German
 A.B., William and Mary; D. d'Université, Strasbourg; M.A., Ph.D.,
 Columbia
- ALICE BRAUNWARTH, 1969, Instructor in Physical Education A.B., Hunter; M.S., Springfield
- JOSEPH GERARD BRENNAN, 1947, Professor of Philosophy A.B., Boston College; M.A., Harvard; Ph.D., Columbia
- PETER D. BROWN, 1967, Instructor in German A.B., M.A., Columbia
- LAMBERTO ANTONIO CANO, 1966, Instructor in Spanish B.B.A., Puerto Rico
- DEMETRIOS CARALEY, 1961, Professor of Political Science A.B., Ph.D., Columbia
- PATRICIA CARPENTER, 1961, Assistant Professor of Music A.B., California
- LUZ CASTANOS, 1967, Instructor in Spanish A.B., M.A., Hunter
- ELIZABETH LOUISE CAUGHRAN, 1956, Associate in English A.B., Russell Sage; M.A., Columbia
- JOY CHUTE, 1964, Adjunct Associate Professor of English
- EDWARD S. COBB, 1963, Assistant Professor of Psychology A.B., M.A., Ph.D., Columbia
- KENNETH COOPER, 1965, Instructor in Music A.B., M.A., Columbia
- WILLIAM A. CORPE, 1 1956, Professor of Biology A.B., M.A., Wisconsin; Ph.D., Pennsylvania State
- EVA CORREDOR, 1968, Instructor in French Dipl. de l'Ecole des Langues Orientales
- MAXINE CUTLER, 1967, Instructor in French A.B., Barnard; Ph.D., Columbia
- DENNIS G. DALTON, 1969, Assistant Professor of Political Science A.B., Rutgers, M.A., Chicago, Ph.D., London
- A.B., California; M.A., Ohio State
- LYNN DAVIS, 1970, Instructor in Political Science A.B., Duke; M.A., Columbia

¹ Absent on leave, Autumn Term.

- GAY A. DELANGHE, 1966, Instructor in Physical Education A.B., M.A., Michigan
- BETTE STUBING DENITCH, 1968, Assistant Professor of Anthropology A.B., Antioch; Ph.D., California
- MARJORIE HOUSEPIAN DOBKIN, 1957-59; 1960, Associate in English A.B., Barnard
- HUBERT DORIS, 1957, Professor of Music A.B., Harvard; M.A., Columbia
- PATRICIA L. DUDLEY, 1959, Associate Professor of Biology A.B., M.A., Colorado; Ph.D., Washington
- LOIS A. EBIN, 1969, Assistant Professor of English A.B., Smith; M.A., Ph.D., Columbia
- DAVID W. EHRENFELD, 1967, Assistant Professor of Biology A.B., M.D., Harvard; Ph.D., Florida
- JOHN T. ELLIFF, 1967, Assistant Professor of Political Science A.B., De Pauw; M.A., Ph.D., Harvard
- ANN FAGAN, 1969, Assistant Professor of History A.B., Carleton; Ph.D., Bryn Mawr
- PATRICIA N. FARNSWORTH, 1967, Assistant Professor of Biology A.B., Morningside; M.S., Ph.D., Columbia
- BRUCE FELD, 1968, Instructor in Political Science B.B.A., Miami; M.A., Rutgers
- DANIEL FIELD, 1970, Assistant Professor of History A.B., M.A., Ph.D., Harvard
- BARBARA M. FITTS, 1969, Instructor in Physical Education B.S., Boston
- ANNETTE B. FOX, 1966, Lecturer in Political Science A.B., Ph.D., Chicago
- RICHARD M. FRIEDBERG, 1968, Associate Professor of Physics A.B., Harvard; M.A., Ph.D., Columbia
- PATRICK X. GALLAGHER, 1965, Professor of Mathematics A.B., Harvard; Ph.D., Princeton
- THEODOR H. GASTER, 1966, Professor of Religion A.B., M.A., London; Ph.D., Columbia; D.D., Vermont
- SERGE GAVRONSKY, 1960, Associate Professor of French A.B. M.A., Ph.D., Columbia
- RENEE GEEN, 1956, Associate Professor of French A.B., Brooklyn; M.A., Wisconsin; Ph.D., Columbia

- SANDRA GENTER, 1961, Associate in Physical Education A.B., Wisconsin; M.A., Columbia
- MARION HAMILTON GILLIM, 1952, Professor of Economics A.B., Mount Holyoke; M.A., Ph.D., Columbia
- EILEEN GOLDWYN, 1970, Assistant Professor of Sociology A.B., Barnard; M.A., California
- JEAN A. GOOCH, 1964, Associate Professor of Economics A.B., California; M.A., Ph.D., Columbia
- PATRICIA ALBJERG GRAHAM, 1965, Associate Professor of Education B.S., M.S., Purdue; Ph.D., Columbia
- TATIANA GREENE, 1946, Associate Professor of French Candid. en Droit, Brussels; M.A., Ph.D., Columbia
- RICHARD F. GUSTAFSON, 1965, Professor of Russian A.B., Yale; Ph.D., Columbia
- DANIELLE HAASE-DUBOSC, 1962, Assistant Professor of French A.B., Barnard; M.A., Columbia
- ELIZABETH HARDWICK, 1965, Adjunct Associate Professor of English A.B., M.A., Kentucky
- ANTHONY G. HENDERSON, 1964, Assistant Professor of English A.B., Harvard; B.A., Cambridge: Ph.D., Columbia
- ELIZABETH A. HOWE, 1970, Instructor in Political Science and Urban Studies A.B., Barnard; M.A., Chicago
- KENNETH H. JANES, 1961, Associate Professor of English and Director of Minor Latham Playhouse
- PETER H. JUVILER, 1964, Associate Professor of Political Science B.E., M.E., Yale; M.A., Ph.D., Columbia
- EDWARD KAPLAN, 1967, Instructor (Part-time) in French A.B., Brown; M.A., Columbia
- EDWARD J. KING, 1946, Professor of Chemistry A.B., State University of Iowa; Ph.D., Yale
- GRACE W. KING, 1960, Lecturer in Chemistry A.B., Maine; Ph.D., Yale
- RUTH M. KIVETTE, 1952, Associate Professor of English
 A.B., Barnard; M.A., Ph.D., Columbia; B.D., Union Theological Seminary
- MORTON KLASS, 1965, Professor of Anthropology A.B., Brooklyn; Ph.D., Columbia

Absent on leave, 1970-71.

- STEPHEN E. KOSS, 1966, Associate Professor of History A.B., M.A., Ph.D., Columbia
- JOHN KOUWENHOVEN, 1946, Professor of English A.B., Wesleyan; M.A., Ph.D., Columbia
- JACQUELINE I. KROSCHWITZ, 1968, Assistant Professor of Chemistry B.S., Ursinus; Ph.D., Pennsylvania
- POLYKARP KUSCH, 1962, Professor of Physics B.S., Case Institute; M.S., Ph.D., Illinois; Nobel Laureate; Sc.D.
- SUE HOWARD LARSON, 1965, Associate Professor of Philosophy A.B., Ph.D., Stanford
- PATRICIA H. LABALME, 1961-64; 1965, Lecturer in History A.B., Bryn Mawr; M.A., Ph.D., Radcliffe
- GORDANA LAZAREVICH, 1969, Instructor in Music M.S., Juilliard
- MARINA LEDKOVSKY, 1969, Assistant Professor of Russian Ph.D., Columbia
- ETHNA LEHMAN, 1968, Assistant Professor of Sociology A.B., College of New Rochelle; M.A., Fordham; Ph.D., Columbia
- LYDIA H. LENAGHAN, 1962, Associate Professor of Greek and Latin A.B., Barnard; M.A., Ph.D., Bryn Mawr
- B.S., Skidmore; M.A., Columbia
- MARISTELLA DE PANIZZA LORCH, 1951, Professor of Italian Dott. in Lett. e Filos, Rome
- JOSEPH L. MALONE, 1967, Assistant Professor of Linguistics A.B., M.A., Ph.D., California
- EDITH MASON, 1956, Associate in Physical Education B.S., Winthrop; M.S., Louisiana State
- BARBARA MATES, 1962, Assistant Professor of Psychology A.B., M.A., Brooklyn; M.A., Ph.D., Columbia
- ALEXANDER R. MAZZIOTTI, 1970, Assistant Professor of Chemistry B.S., Seton Hall; Ph.D., Pennsylvania State
- ROBERT A. MCCAUGHEY, 1969, Assistant Professor of History A.B., Rochester; M.A., North Carolina; Ph.D., Harvard
- ROBERT EUGENE MCGINN, 1968, Assistant Professor of Philosophy B.S., Stevens Institute of Technology; M.S., Ph.D., Stanford

¹ Joint appointment with Columbia.

- JOHN MESKILL, 1960, Associate Professor of Chinese and Japanese A.B., Harvard; Ph.D., Columbia
- GLADYS MEYER, 3 1948, Associate Professor of Sociology A.B., Wellesley; Ph.D., Columbia
- DEBORAH D. MILENKOVITCH, 2 1965, Assistant Professor of Economics A.B., Radcliffe; Ph.D., Columbia
- BARBARA S. MILLER, 1968, Assistant Professor of Oriental Studies A.B., Barnard; M.A., Columbia; Ph.D., Pennsylvania
- ELLEN MOERS, 1968, Adjunct Associate Professor of English A.B., Vassar; M.A., Radcliffe, Ph.D., Columbia
- JOANN RYAN MORSE, 1 1957, Associate Professor of English A.B., Vassar; M.A., Yale
- MARY MOTHERSILL, 2 1963, Professor of Philosophy A.B., Toronto; M.A., Ph.D., Radcliffe
- ONORA S. NELL, 1970, Assistant Professor of Philosophy B.A., Oxford; Ph.D., Harvard
- A.B., George Washington; M.A., Ph.D., Columbia
- BARBARA NOVAK, 1958, Professor of Art History A.B., Barnard; M.A., Ph.D., Radcliffe
- DOROTHEA NYBERG, 1968, Associate Professor of Art History A.B., Toronto; M.A., Ph.D., New York University
- BRIAN O'BYRNE, 1970, Assistant Professor of Mathematics Ph.D., Cornell
- MARIA MARCH DE ORTI, 1965-67; 1968, Assistant Professor of Spanish A.B., California; M.A., Washington; Ph.D., Columbia
- DONALD PACE, 1968, Instructor in English A.B., Washington; M.A., Columbia
- ELAINE H. PAGELS, 1970, Assistant Professor of Religion A.B., M.A., Stanford
- DANIEL PAGET, 1967, Associate in Music A.B., M.A., Columbia
- REMINGTON P. PATTERSON, 1955, Associate Professor of English A.B., M.A., Ph.D., Yale

¹ Absent on leave, Autumn Term

² Absent on leave, Spring Term

³ Absent on leave, 1970-71

- THOMAS B. PERERA, 1966, Assistant Professor of Psychology A.B., M.A., Ph.D., Columbia
- FREDERICK G. PETERS, 1970, Assistant Professor of German A.B., Pennsylvania; B.Litt., Oxford; M.A., Columbia; Ph.D., Cambridge
- MARION R. PHILIPS, 1 1945-55; 1958, Assistant Professor of Physical Education A.B., Hunter; M.A., Columbia
- RANDOLPH D. POPE, 1969, Instructor in Spanish Lic. en Leng. y Lit. Espanola Universidad Catolica de Valparaiso
- ANNE LAKE PRESCOTT, 1959-62; 1963, Assistant Professor of English A. B., Barnard; M.A., Ph.D., Columbia
- A.B., Notre Dame; Ph.D., Columbia
- HERMINE RIFFATERRE, 1961, Assistant Professor of French A.B., Hunter; M.A., Columbia; B. es L., Toulouse; Ph.D., Columbia
- DONALD D. RITCHIE, 1948, Professor of Biology A.B., B.S., Furman; M.A., Ph.D., North Carolina
- PAUL RITTERBAND, 1970, Assistant Professor of Sociology A.B., Yeshiva; Ph.D., Columbia
- DAVID A. ROBERTSON, JR., 1940, Millicent Carey McIntosh Professor of English A.B., M.A., Ph.D., Princeton
- JEANETTE SCHLOTTMANN ROOSEVELT, 1951-58; 1962, Associate in Physical Education
 B.S., M.A., Texas Woman's University
- A.B., Barnard; M.A., Ph.D., Columbia
- ABRAHAM ROSMAN, 1966, Associate Professor of Anthropology A.B., City University of New York; Ph.D., Yale
- CHRISTINE ROYER, 1965, Instructor in English A.B., Western Maryland; M.A., Pennsylvania
- PAULA G. RUBEL, 1965, Associate Professor of Anthropology A.B., Hunter; Ph.D., Columbia
- RINALDINA RUSSELL, 1969, Instructor in Italian Dott. in Filos., Rome
- RUTH L. RUTSCHMANN, 1965, Assistant Professor of Psychology A.B., Skidmore; M.A., Ph.D., New School for Social Research

¹ Absent on leave, Spring Term

- MAIRE SAID, 1968, Assistant Professor of English A.B., Vassar; Ph.D., Harvard
- GERTRUDE M. SAKRAWA, 1952, Associate Professor of German M.A., Columbia; Ph.D., Vienna, Columbia
- JOHN E. SANDERS, 1969, Professor of Geology A.B., Ohio Wesleyan; Ph.D., Yale
- ANATOL K. SAPRONOW, 1966, Associate in Russian Russian Gymnasium, Belgrade
- MARIANNA GREENE SAPRONOW, 1967, Instructor in Russian Russian Gymnasium, Munich
- RAYMOND J. SAULNIER, 1938, Professor of Economics

 B.S., Middlebury; M.A., Tufts; Ph.D., Columbia; LL.D., Middlebury,
 Babson Institute
- SYLVIE SAYRE, 1969, Instructor in French Agrégation, U. of Paris
- BERNICE SEGAL, 1 1958, Associate Professor of Chemistry A.B., Radcliffe; Ph.D., Columbia
- MIRELLA d'AMBROSIO DE SERVODIDIO, 1964, Associate Professor of Spanish A.B., Barnard; M.A., Ph.D., Columbia
- ANN C. SHEFFIELD, 1969, Instructor in Greek and Latin A.B., Smith; M.A., Stanford
- MAURICE Z. SHRODER, 1965, Professor of French B.S., Northwestern; M.A., Ph.D., Harvard
- GARRETT A. SMITH, JR., 1970, Instructor in Geography A.B., Rochester; M.A., Harvard
- JOHN B. SNOOK, 1968, Assistant Professor of Religion A.B., Harvard; B.D., Union Theological Seminary; Ph.D., Columbia
- LOUISE G. STABENAU, 1925, Associate Professor of German, retired Abitur, Bremen; A.M., Columbia
- DOMNA CALLIMANOPULOS STANTON, 1962, Assistant Professor of French A.B., Wellesley; M.A., Columbia
- EMMA DIETZ STECHER, 1945, Professor of Chemistry A.B., Barnard; M.A., Columbia; Ph.D., Bryn Mawr
- CATHARINE R. STIMPSON, 1963, Assistant Professor of English A.B., Bryn Mawr; B.A., Cambridge; Ph.D., Columbia

¹ Absent on leave, Autumn Term

- GEORGE STRICEVIC, 1968, Assistant Professor of Art History Ph.D., Serbian Academy of Sciences and Fine Arts
- DANIEL SULLIVAN, 1970, Instructor in Sociology B.S., St. Lawrence
- HOWARD M. TEICHMANN, 1946, Adjunct Professor of English A.B., Wisconsin
- PATRICIA TERRY, 1958, Lecturer in French A.B., Wellesley; M.A., Ph.D., Columbia
- JANICE FARRAR THADDEUS, 1956, Lecturer in English A.B., Barnard; M.A., Ph.D., Columbia
- ELEANOR M. TILTON, 1950, Professor of English A.B., Mount Holyoke; M.A., Boston; Ph.D., Columbia
- ZOYA A. TRIFUNOVICH, 1959, Associate in Russian B.S., M.A., Columbia
- MARGARITA UCELAY, 1943, Professor of Spanish
 Bach. Instituto-Escuela de Madrid; M.A., Ph.D., Columbia
- BARRY ULANOV, 1951, Professor of English A.B., Ph.D., Columbia; Litt.D., Villanova
- JOAN E. VINCENT, 1968, Assistant Professor of Anthropology B.Sc., London School of Economics; M.A., Chicago; Ph.D., Columbia
- FREDERICK E. WARBURTON, 1 1963, Associate Professor of Biology B.Sc., M.Sc., Ph.D., McGill
- SUZANNE F. WEMPLE, 1966, Assistant Professor of History A.B., California; M.L.S., Ph.D., Columbia
- CHILTON WILLIAMSON, 1942, Professor of History A.B., M.A., Ph.D., Columbia
- GEORGE WOODBRIDGE, 1960, Associate Professor of History A.B., M.A., Columbia; Ph.D., Wisconsin
- A.B., Carleton; Ph.D., Yale
- LEONARD ZOBLER, 1955, Professor of Geography B.S., M.S., Washington State; Ph.D., Columbia
- B.S., Southwest Missouri State Teachers; M.A., Ed.D., Columbia
- MARY HELEN MCMAHON, 1969, Registrar B.S., A.M., Saint Louis

Absent on leave, Spring Term

- MARJORY J. NELSON, 1948, College Physician A.B., Barnard; M.D., Cornell
- ROBERT B. PALMER, 1967, Librarian M.A., Middlebury; M.S., Simmons
- NATALIE SONEVYTSKY, 1959, Reference Librarian A.B., New Rochelle; M.S., Columbia

FACULTY EMERITI

- WILLIAM HALLER, 1909-1950, Professor Emeritus of English Ph.D., L.H.D.
- FLORENCE DE LOISELLE LOWTHER, 1914-1950, Professor Emeritus of Zoology Ph.D.
- ELIZABETH FAULKNER BAKER, 1919-1952, Professor Emeritus of Economics Ph.D.
- HUGH WILEY PUCKETT, 1916-1953, Professor Emeritus of German Ph.D.
- HELEN R. DOWNES, 1933-1960, Professor Emeritus of Chemistry Ph.D.
- AMELIA A. DE DEL RIO, 1930-1962, Professor Emeritus of Spanish Ph.D.
- MILLICENT C. MCINTOSH, 1947-1962, President Emeritus Ph.D., LL.D., Litt.D., L.H.D.
- MARGARET HOLLAND, 1926-1964, Professor Emeritus of Physical Education M.A.
- THOMAS P. PEARDON, 1923-1965, Professor Emeritus of Political Science Ph.D.
- W. CABELL GREET, 1926-1966, McIntosh Professor Emeritus of English Ph.D., Litt.D.
- ESTHER GREENE, 1944-1967, Librarian Emeritus A.B., B.S.
- LUCYLE HOOK, 1948-1967, Professor Emeritus of English Ph.D.
- MARION LAWRENCE, 1929-1967, Professor Emeritus of Art History Ph.D.
- RENE ALBRECHT-CARRIE, 1945-1969, Professor Emeritus of History Ph.D.

- EUGENIO FLORIT, 1945-1969, Professor Emeritus of Spanish D. en D.
- VIRGINIA D. HARRINGTON, 1942-1969; Professor Emeritus of History Ph.D.
- JEAN T. PALMER, 1946-1969, General Secretary Emeritus A.B.
- HENRY A. BOORSE, 1937-1970, Professor Emeritus of Physics and Dean Emeritus of the Faculty Ph.D.
- JULIUS S. HELD, 1936-1970, Professor Emeritus of Art History Ph.D.
- MIRRA KOMAROVSKY, 1934-1970, Professor Emeritus of Sociology Ph.D.

OTHER OFFICERS OF INSTRUCTION

- ELIZABETH BARNES, 1970, Teaching Assistant in Biology A.B., Barnard; M.A., Hunter
- VICTORIA F. BARR, 1967, Instructor (Part-Time) in Art History B.F.A., Yale
- SHEILA BASSMAN, 1968, Assistant in Chemistry A.B., Barnard
- CYNTHIA BROWN, 1970, Instructor (Part-time) in Economics A.B., Bryn Mawr; M.A., Columbia
- J. EARL CLEMENS, 1969, Associate in History A.B., M.A., Michigan
- LEA FISCHBACH, 1968, Assistant in Chemistry A.B., Barnard
- BARBARA GOODSTEIN, 1967, Assistant in Chemistry A.B., Barnard
- ANNE HEUNE HOY, 1970, Instructor (Part-time) in Art History M.A., New York University
- BONA KOSTKA, 1962-63; 1969, Instructor (Part-time) in Medieval and Renaissance Studies

 Dott. in Lett., Rome
- ANYA LUCHOW, 1970, Instructor (Part-time) in Russian A.B., Barnard

- OHN L. MISH, Adjunct Professor of Religion Ph.D., Berlin
- B.S., Northwestern U.
- ENNIO L. RAO, 1968, Instructor (Part-time) in Italian
- RANDALL RUSTIN, 1968, Instructor (Part-time) in Mathematics M.S., Adelphi
- A.B., Columbia; M.A., Chicago
- B.S., Juilliard (Part-time) in Physical Education
- P. NICO SOLINAS, 1967, Instructor in Italian
- SANDRA STINGLE, 1967, Instructor (Part-time) in Psychology A.B., Barnard
- INDA YELLEN, 1969, Assistant in Italian A.B., Barnard
- ADJA YUNKERS, 1970, Visiting Artist

OFFICERS OF ADMINISTRATION

MARTHA PETERSON, Ph.D., L.H.D., LL.D.

President of Barnard College and Dean in the University

LEROY C. BREUNIG. Ph.D.

Dean of the Faculty and Professor of French

HELEN PHELPS BAILEY, Ph.D. Dean of Studies and Professor of French

FORREST L. ABBOTT, Ed.D.

Treasurer and Controller

OFFICE OF THE PRESIDENT

HENRY A. BOORSE, Ph.D.

Assistant to the President and Professor of Physics

JANE MOORMAN, Ph.D.

Assistant to the President

DOROTHY H. HEFFERLINE, M.A.

Administrative Assistant

NOVELLA I. LANDAU

Secretary to the President

OFFICE OF THE DEANS

BARBARA S. SCHMITTER, M.A.

Associate Dean of Studies and Associate Professor of Psychology

CHRISTINE ROYER, M.A.

Adviser to the Class of 1972

GRACE KING, Ph.D.

Adviser to the Class of 1973

LOUISE G. STABENAU, M.A.

Adviser to the Class of 1973

and Adviser to Foreign Students

LYDIA H. LENAGHAN, Ph.D.

Adviser to the Class of 1974 Adviser to the Class of 1974

RUTH L. RUTSCHMANN, Ph.D.

Adviser to the Class of 1974

MAIRE SAID, Ph.D.

PATRICIA GLARUM, A.B.

Executive Assistant

OFFICE OF ADMISSIONS

HELEN M. MCCANN, A.B.

Director

MARGARET DYKES DAYTON, M.A.

Associate Director

ANNE GREER, A.B.

Assistant Director

OFFICE OF THE ASSOCIATE ALUMNAE

NORA L. PERCIVAL, A.B.

Director

OFFICERS OF ADMINISTRATION

OFFICE OF BUILDINGS AND GROUNDS

JOHN G. KIESSLING

Director

MARY BANE

Manager of Purchasing

MARGARET V. O'SHEA

Supervisor of Building Services

OFFICE OF THE BURSAR

FRANCES A. BARRY, M.S.

Bursar

OFFICE OF COLLEGE ACTIVITIES

ELIZABETH Y. MEYERS, M.A.

Director

OFFICE OF THE DEAN OF THE FACULTY

LEMOINE CALLENDER, M.S.

Assistant to the Dean

VIRGINIA SHAW, A.B.

Director of Institutional Studies and Secretary to the Faculty

DEVELOPMENT OFFICE

BARBARA V. HERTZ, A.B.

Director

ELEANOR MINTZ, A.B.

Director, Barnard Fund

FINANCIAL AID

KENNETH R. OSTBERG, M.A.

Director

FOOD SERVICES

ELEANOR R. SMITH, B.S.

Director

AUDREY BELL

Administrative Assistant

HEALTH SERVICE

MARJORY J. NELSON, M.D.

HARRIET R. MOGUL, M.D.

ZIRA DE FRIES, M.D.

LILO R. GROTHE, Ph.D.

DENISE SAKS, J.S.D.

College Physician

Assistant College Physician

College Psychiatrist

Psychiatric Counselor

Psychiatric Counselor

LELA ANDERSON, R.N.

Nurse

BEATRICE G. TUCKER, R.N.

Nurse

CHARLES L. GILBERT, M.D.

University Medical Officer

LIBRARY

ROBERT B. PALMER, M.A., M.S.

Librarian

NATALIE SONEVYTSKY, M.S.

Reference Librarian

ELIZABETH M. CORBETT, M.S.

Circulation Librarian

PATRICIA K. BALLOU, A.B., B.S.

Assistant Reference Librarian

MARY J. KELLY, M.S.

Order Librarian

LYNNE M. BRODY, M.S.

Assistant Reference and Circulation Librarian

OFFICE SERVICES

WINIFRED PRICE

Director

OFFICE OF PLACEMENT AND CAREER PLANNING

JANE S. GOULD, M.A.

Director

HILARY F. KNATZ, M.A.

Administrative Assistant

OFFICE OF PUBLIC RELATIONS

SARAH W. JOHNSON, M.A.

Director

To be appointed

Assistant Director

OFFICE OF THE REGISTRAR

MARY HELEN MCMAHON, B.S., M.A.

Registrar

DORIS CAMPBELL, A.B.

Assistant Registrar

OFFICE OF RESIDENCE

BLANCHE E. LAWTON, M.A.

Director

OFFICE OF THE TREASURER AND CONTROLLER

HELEN VANIDES

Executive Assistant

III. An Introduction to the College

BARNARD'S HISTORY

Barnard College was among the pioneers in the late nineteenth century crusade to make higher education available to young women. The history of its achievement is an integral part of the history of Columbia University.

The University had its origin in a royal charter, granted in 1754 by George II, creating King's College. Its operations were interrupted during the Revolutionary War when its buildings were requisitioned by the Continental Armies, but it was reopened in 1784 as Columbia College and, in 1896, was designated a university.

Barnard College grew out of the idea, first proposed by Columbia's tenth president, Frederick A. P. Barnard, that young women be admitted to Columbia. Initially ignored, the idea was developed by President Barnard until it led to the creation of a "Collegiate Course for Women." Under the new plan highly qualified women were authorized to follow a prescribed course leading ultimately to a Columbia degree, but no provision was made for where and how they were to pursue their studies. Destined to fail, this arrangement was abandoned six years later when Columbia's trustees agreed to the establishment of an affiliated college for women. A provisional charter and the promise of funds were secured, and Barnard College was named in honor of its earliest and most persistent advocate.

In October 1889, the first Barnard class met in a rented brownstone house at 343 Madison Avenue with fourteen students enrolled in the School of the Arts, twenty-two "specials" enrolled in science because they lacked the entrance requirements in Greek, and a faculty of six.

Nine years later Barnard moved to its present site on Morningside Heights, and in 1900 was incorporated in the educational system of Columbia University with provisions which at that time were unique among women's colleges: it was to be governed by its own Trustees, Faculty, and Dean, and was responsible for its own endowment and plant, while sharing the instruction, the library, and the degrees of a university.

BARNARD TODAY

In contrast to the pioneer days, Barnard today has a teaching staff of almost 200 men and women: outstanding scholars whose primary concern is the education of the undergraduate students at the College, and many of whom bring an added vitality to their teaching from their professional activities outside the classroom. From the original fourteen matriculated students, enrollment has increased to over 1,900; since 1893 Columbia has awarded its degree to 15,463 Barnard students. The original pledges of support have expanded to current endowment funds of \$22,412,859.00.

THE CURRICULUM

Within the University Barnard's corporate identity is maintained as an independent college for women. The curriculum offers the undergraduate opportunity to study the liberal arts and sciences.

Specific requirements for the degree are outlined on pages 35-37. Assistance in planning her individual course of study is given by the student's class adviser, a member of the teaching staff who supervises the work of the freshman and the sophomore years.

At the end of this period, each student chooses her major field. During the junior and senior years her major adviser guides advanced study in the area of concentration and other phases of the college work. Twenty-four departments offer major programs and seven interdepartmental majors are also available.

Classes vary in size. Language classes are small as are other courses in which student participation is important. Introductory courses and classes taught primarily by the lecture method are often divided into small groups for conference and discussion. Laboratory work in the sciences is conducted with a wide variety of modern laboratory equipment. There are opportunities for independent work and students may also be invited to participate in the research projects of members of the Faculty. Some undergraduate courses are held with Columbia College, and several departments are linked closely with the University, sharing faculty, students and facilities. Graduate courses in the University are also open to qualified upperclassmen under certain conditions.

THE CAMPUS

The campus occupies four acres of urban property along Broadway between 116th and 120th Streets. At the southern end of the campus, three residence buildings, Brooks, Hewitt, and Helen Reid Halls, face Altschul Court, a land-scaped quadrangle.

Barnard Hall stands just north of the open courtyard and contains seminar rooms, classrooms, and faculty offices, as well as a gym, a swimming pool, dance studios, and a student lounge called the James Room. The College Parlor on third floor is used for meetings and small social events.

Adele Lehman Hall is a modern five-story building containing the Wollman Library, faculty offices and classrooms. The library has over 115,000 volumes in an open shelf arrangement on three floors. This collection of carefully selected books is designed to cover curriculum requirements as well as to provide opportunities for independent work in many fields. A collection of approximately 3,500 music and spoken records, a large selection of periodicals and journals, photographs and art reproductions housed in a separate print room supplement and strengthen the book collection. There are ample listening facilities for records and an audio-visual studio and control room for the recording of tapes and the use of other equipment. The reading areas contain a number of indi-

AN INTRODUCTION TO THE COLLEGE

vidual study carrels, many of which overlook a lawn surrounded by small trees and shrubs. Barnard students also have access to the University's Butler Library of almost four million volumes, one million manuscripts and fifty thousand periodical listings. The other twenty-nine libraries of the University are also available for additional research.

Helen Goodhart Altschul Hall and the Millicent McIntosh Center, which were dedicated jointly in November 1969, face each other across an open plaza. The fourteen stories of Altschul Hall are devoted primarily to the sciences but also house the Herbert H. Lehman Auditorium on the first floor, and a language laboratory on the fourth which is utilized by all the language departments. Headquarters for student activities, a snack bar and a lounge are located in the McIntosh Center. Student mailboxes are there as well as music practice rooms, recreation and television rooms, bowling alleys, an art exhibit area, and the Jean T. Palmer Room, furnished with a conference table and chairs.

Milbank Hall occupies the northern extreme of the campus and houses administrative and faculty offices; classrooms; a greenhouse; and the Minor Latham Playhouse, a small well-equipped modern theatre. The French, German, and Spanish Departments maintain social and reading rooms in Milbank Hall.

Columbia University is directly across Broadway from the Barnard campus. Off campus, but in the immediate neighbohood, Barnard maintains other residence halls, including: 616 and 620 West 116th Street, two apartment buildings owned by the College and containing suites accommodating five to six girls each; and Plimpton Hall, completed in 1968, which houses 280 students in apartment style units. Each Plimpton resident lives in a single room in a five-room suite with a central kitchen and bath.

STUDENT LIFE

Barnard's student population is cosmopolitan in nature. While one third of the students have families within commuting distance, the others come from nearly every state and some twenty-five foreign countries.

AN INTRODUCTION TO THE COLLEGE

The students represent diversity in background and training; and a mingling of economic, regional, and cultural strains finds expression in the life of the campus.

The Undergraduate Association, of which all students are members, sponsors extracurricular activities reflecting current interests: the college newspaper, the literary magazine, dramatic groups, political and religious organizations, and pre-professional and departmental clubs. Cooperation between Barnard and Columbia groups is common. Many activities, such as the University's chorus and its orchestra, its radio station, and a community service program enlist members from both campuses.

During the past four years the structure of Barnard's student government has undergone fundamental revision, culminating this year in the development of several tri-partite college committees. Students, faculty, and administrators serving on these committees share responsibility for policy decisions in the areas of curriculum, housing, financial aid, orientation, and the library.

The Honor Code, instituted at Barnard in 1912, governs all aspects of academic life and is administered by the student Honor Board. A Judicial Council of undergraduates, faculty and staff, recommends disciplinary action for non-academic offenses.

Religious organizations and activities with headquarters on the Columbia campus at Earl Hall encompass nearly every faith and are open to all students. The Thursday Noon Meeting at Barnard provides a weekly forum for discussion of a wide range of contemporary issues. Student artists with a diversity of talents and interests collaborate to produce the free-wheeling Spring Festival.

The Athletic Association sponsors many campus activities, including tennis, basketball, water ballet, fencing, and modern dance, as well as some athletic events with other colleges. In 1933 the alumnae purchased a lodge on twenty acres of wooded land in Westchester County. The camp, named Holly House, provides an accessible site for country weekends throughout the year.

NEW YORK IS BARNARD'S LABORATORY

More than fifty years ago, Nicholas Murray Butler, one of Columbia's great presidents, observed, "New York is intensely cosmopolitan and contact with its life for a short time during the impressionableness of youth is in itself a liberal education." The city is an extension of the campus, utilized by every department to narrow the gap between learning and living. Barnard is a university college in an international city, and today the curriculum affirms and encourages precise and graphic use of its vast metropolitan laboratory.

IV. Admission

Since entering classes are limited in size, admission to Barnard College is on a selective basis. The Committee on Admissions endeavors to choose candidates who seem most receptive to the discipline and challenge of a liberal arts education. Each applicant is considered in the light of her past performance, the qualities of mind and spirit which insure her growth as an individual, and her ability to contribute to the growth of those with whom she will associate in college and throughout her adult life.

The College believes it is also desirable for the student body to represent a stimulating variety of schools, both public and independent, from all parts of the United States and from abroad.

Students who can visit the college for an interview should plan to do so in the fall of their senior year, or in the late spring of the junior year; others may arrange interviews with Barnard Area Representatives whose names are listed on pages 225-231.

ADMISSION TO THE FRESHMAN CLASS

Application for admission to the freshman class should be made before January 1 of the year of entrance. It is advisable, however, to apply by the end of the junior year or the fall of the senior year. Application forms may be obtained by writing to the Director of Admissions.

A nonrefundable fee of \$15 must accompany each application. Checks or money orders must be in U.S. funds drawn on a U.S. bank, and made payable to Barnard College.

Students are admitted to the freshman class in September. They must be at least fifteen years of age, and should present the following credentials.

- 1) Evidence of good character, which is obtained from confidential reports from the applicant's secondary school principal and teachers and, if possible, through a personal interview at the College.
- 2) Evidence of sound health, to be submitted as soon as the applicant has been accepted, on forms provided by the Office of Admissions.
- 3) Evidence of intellectual ability and achievement, which is reported by the secondary school to the College, and is also demonstrated by the required College Entrance Examination Board tests.

Candidates for admission must offer a college preparatory program from an approved secondary school or should have equivalent education representing a four-year course of study. Academic preparation for admission should be based on the requirements for the A.B., or liberal arts, degree. A recommended program would comprise four years of work in English; three years in mathematics; four years in a foreign language (ancient or modern); one year in a science

with laboratory; and one year in history. An introduction to a second foreign language is generally useful. The remainder of the program would include additional work in the aforementioned subjects with the possible addition of music and art.

The Committee on Admissions is willing to consider the applications of students whose preparation may vary from the usual pattern but whose records give evidence of genuine intellectual ability and interest.

Every candidate for admission to the freshman class is required to take the College Entrance Examination Board Scholastic Aptitude Test and three Scholastic Achievement Tests. The latter must be taken in (1) English composition, (2) a foreign language, and (3) history, science, or mathematics. The Scholastic Aptitude Test must be taken in November, December or January of the senior year in high school. Achievement Tests in continuing subjects (English, foreign languages, mathematics, etc.) must be taken in December or January of the senior year. Achievement Tests in one-year subjects or those completed in the junior year may be taken in May of the junior year. It is the student's responsibility to direct the College Entrance Examination Board to send official test scores to the Office of Admissions.

EARLY DECISION PLAN

In order to alleviate some of the problems arising from multiple applications, Barnard, with the other members of the Seven College Conference, has agreed to take action in the fall of the senior year on the applications of well-qualified students who have made their choice of a college by that time. Students wishing to apply under this plan should signify their intention when they request application papers. They must be certified by their school as having filed only one application.

Single-choice candidates for Barnard admission should send their application to the Office of Admissions, Barnard College, New York, N. Y. 10027, before October 15 of the senior year. Applications must be accompanied by the \$15 application fee.

Late in November Barnard will send to single-choice applicants letters of admission or rejection, or, in doubtful cases, postponement of decision until the customary date in the spring. Each applicant will be considered on the basis of (1) the recommendation of her school principal or counselor, (2) her three-year record at school, and (3) the results of the required College Board Scholastic Aptitude Test and the three Scholastic Achievement Tests taken in her junior year in English composition, a foreign language, and history, science, or mathematics.

The successful candidate will be expected to complete her senior year satisfactorily and to submit a record of that year's work. She will not be asked to repeat any College Board examinations. She must agree to pay to Barnard in January a deposit of \$100, if she is to be a commuting student, and \$150 if she is to be a resident student, to hold her place in the freshman class.

The candidate on whose application decision has been postponed will be given full and careful consideration in the spring. She will be asked to submit a record of her school work for the first half of her senior year, with the results of senior College Board Scholastic Aptitude and Achievement Tests as additional evidence.

Candidates on whose credentials favorable action is not taken may file applications at other colleges after receiving their notification from Barnard.

THE COLLEGE ENTRANCE EXAMINATION BOARD TESTS

The College Entrance Examination Board will administer the following series of tests in 1970-71:

Saturday, November 7, 1970 (Scholastic Aptitude Test only)

Saturday, December 5, 1970 (No Foreign Language Achievement Examination)

Saturday, January 9, 1971

Saturday, March 6, 1971 (No Foreign Language Achievement Examination)

Saturday, April 17, 1971 (Scholastic Aptitude Test only)

Saturday, May 1, 1971 (Achievement Tests only)-

Saturday, July 10, 1971 (No Foreign Language Achievement Examination)

Candidates should write directly to the College Entrance Examination Board, Box 592, Princeton, New Jersey 08540, for the Bulletin of Information containing descriptions of the Scholastic Aptitude and Achievement Tests, directions for filing applications, and lists of examination centers. When requesting the application forms, candidates should state the month in which they wish to take the tests.

Residents of California, Oregon, Washington, Idaho, Montana, Wyoming, Utah, Colorado, Nevada, Arizona, New Mexico, Alaska, Hawaii, Australia, Mexico, and the Pacific Islands should write to the Pacific Coast Office of the Board, Berkeley, California 94701.

To facilitate the arrangements for the conduct of the tests, all applications should be filed as early as possible. The normal closing date for the receipt of applications in Princeton, New Jersey, or Berkeley, California, for candidates outside the United States, the Canal Zone, Canada, Mexico, and the West Indies is two months before the date of the examination; for all other candidates the closing date is four weeks before the date of the examination. A penalty fee of \$3.00 to accompany the application will be charged for applications received later than the normal closing date.

No applications received in Princeton or Berkeley later than two weeks before the examination date will be considered. Candidates may not register for the tests at the examination centers. Each application should be accompanied by the appropriate examination fee:

Scholastic	Aptitude Test alone	\$5.50
		8.50

The Board will report the results of the tests to the institutions indicated on the candidates' applications. The colleges, in turn, will notify the candidates of the action taken on their applications for admission.

ADMISSION WITH ADVANCED PLACEMENT

Students who have completed advanced work in secondary school and who present satisfactory scores on the Advanced Placement Tests of the College Entrance Examination Board may be placed in courses above the level of the freshman year, at the discretion of the departments concerned.

Students with scores of 4 or better on the College Entrance Examination Board Advanced Placement Tests may be given credit toward the thirty-two course requirement for the degree, provided the Barnard departments concerned so recommend. Credit for advanced placement work will in no case be in excess of four semester courses. A petition for credit must be submitted to the Committee on Programs and Academic Standing.

ADMISSION TO ADVANCED STANDING

Transfer students are admitted in September and in February. Candidates should present a strong record of not less than one year's work at an accredited college, or foreign university, or institution of equivalent grade. In general, credit is given for courses taken at another college which are similar in content to those offered at Barnard. (See also page 37.)

The student should submit her formal application and the following credentials: her secondary school record, a recommendation from her principal and her college dean or class adviser, a complete and official transcript of her college work and a copy of the college catalogue in which the courses she has taken are clearly marked, and the results of the College Entrance Examination Board tests. A candidate will be asked to take the College Entrance Examination Board Scholastic Aptitude Test if she has not already done so. No definite credit for junior college work can be assigned until the student has had an opportunity to establish a satisfactory record at Barnard.

In all cases, final action on admission of a transfer student depends upon the receipt of a statement of honorable dismissal, which is a certificate of good character from an authorized representative of her college, and the required health reports.

Application for admission to advanced standing should be submitted before May 15 for admission in September and before December 1 for admission in February. All credentials should be in the hands of the Committee on Admissions by September 15; otherwise, the student may be asked to postpone registration until after classes begin, thereby incurring an additional fee of \$15 for lateness.

Seniors who are degree candidates at other colleges may apply for permission to complete their requirements at Barnard. Each applicant must present satis-

factory college records and letters of approval from her Dean and her major adviser, and agree to comply with all Barnard regulations concerning attendance and course examinations.

ADMISSION OF FOREIGN STUDENTS

The College is interested in the applications of qualified foreign students. Candidates are expected to take the Scholastic Aptitude Test given by the College Entrance Examination Board, if they can arrange to do so. (This test examines the student's ability to understand word relationships and to comprehend what is read, and the ability to understand and solve mathematical problems.) Freshmen candidates should also present the Achievement examination results. Requests for an examination center overseas should reach the Board, Box 592, Princeton, New Jersey 08540, two months prior to the dates listed on the previous pages.

Knowledge of the English language is essential for admission. It is recommended that applicants take the TOEFL, Test of English as a Foreign Language. Information about registration should be obtained by writing to the TOEFL Program, Educational Testing Service, Princeton, New Jersey 08540. If the results of this examination cannot be presented, students whose native language is not English are required to take the American University Language Center Test. Arrangements for it should be made through the United States Consulate.

During the week of registration (September or February) all foreign students must take English placement tests in writing, aural comprehension, and speech. Failure to pass these tests will necessitate remedial courses in English at Columbia University, either without academic credit or with limited credit, depending on the level of the course and the grade obtained. No credit is assigned for other academic courses until the remedial work is successfully completed.

Limited financial aid is granted to qualified applicants. Admitted students should direct an inquiry to the nearest American Embassy concerning the possibility of securing a Fulbright travel grant. Employment during the first year here is not permitted. Official approval must be obtained from the Immigration and Naturalization Service for paid work after the first year.

Definite credit for study at foreign institutions is not assigned until a full year of satisfactory work has been completed at Barnard. It is hoped that the foreign student will return to her home country and utilize her education after completion of studies in the United States.

For information concerning the Medical Expense Policy which is obligatory for foreign students whose homes are outside the United States, please see page 203.

Candidates are urged to communicate with the Director of Admissions well in advance of the date they wish to enter, so that the College may be of assistance to them in making their plans.

READMISSION

A student who has withdrawn from the College, or who has been on leave of absence, is not automatically readmitted. She should make application for readmission to the Director of Admissions. A nonrefundable fee of \$15 must accompany the application of any student who has not been granted a leave of absence by the Dean of Studies. Completed applications are due by December 1 for the Spring Term, and by May 15 for the Autumn Term. All required credentials (e.g., medical reports, transcripts, recommendations) as well as the application must be submitted by these dates.

V. Degree Requirements

ACADEMIC REQUIREMENTS FOR THE A.B. DEGREE

Requirements for the Bachelor of Arts degree serve as a framework for the acquisition of knowledge of the various fields of human thought. They have been planned to secure for the student a sound foundation in the liberal arts and sciences on which to base intensive work in the sphere of her special interest. These requirements call for the completion of 32 courses and include the following:

I. BASIC.

- 1) English A1. (Foreign students please refer to page 33.)
- 2) One science (two semesters), with laboratory.
- 3) Foreign language. Competence in a modern foreign language, or in Greek or Latin. This requirement may be fulfilled either by passing an examination with a sufficiently high score, or by satisfactory completion of a designated course. (See the statement under the appropriate language department for further details.)

II. GENERAL.

Completion of six semester courses outside the major department, selected from the following six categories (no more than two courses in any single category may satisfy the requirement):

- 1) Art history; music
- 2) Literature in the language in which it was originally written
- 3) Philosophy; religion
- 4) History
- 5) Anthropology; economics; geography; government; sociology
- 6) Mathematics

III. MAJOR.

A major field is to be selected before the end of the sophomore year, consisting of no fewer than 8 courses of prescribed work. Each department requires, as specified, either a senior thesis or a major examination or an equivalent demonstration of achievement in the discipline. A major may be chosen in any one field, or in such combinations as are approved by the Committee on Programs and Academic Standing.

IV. PHYSICAL EDUCATION.

Completion of six semesters required for students admitted as freshmen; four semesters for students admitted as sophomores; two semesters for students admitted as juniors.

All requirements must be completed within six years of the student's matriculation as a freshman at Barnard or elsewhere.

SATISFACTION OF REQUIREMENTS BY EXAMINATION

At the discretion of the department involved, a student may take special examinations which, if successfully passed, offer exemption from basic, general, and major requirements. Special examinations may also be taken to demonstrate preparation for admission to advanced courses. Further details concerning such examinations are available in the Office of the Registrar and the departmental offices. The purpose of these examinations is to allow the student a wider intellectual experience than would otherwise be possible during the four-year College course.

SENIOR SCHOLAR PROGRAM

The Senior Scholar Program allows especially qualified students to undertake a single project, with exemptions from all course and major requirements, in their senior year. The program is intended to meet the needs of those few students who come to the senior year with a record of unusual accomplishment in a specific area of scholarship, or in the practicing arts. A student with such qualifications, who has a clear and well-organized proposal and has found a faculty adviser to direct her work, should apply to the department concerned by midsemester of the second term of the junior year. At the conclusion of the junior year, the student should have completed all basic and general requirements for the degree.

RESIDENCE

Students are expected to be registered for full-time work for four years. Requests for acceleration will be granted sparingly and only for reasons of weight. Such requests must be submitted no later than October 1 of the junior year. Normally, only 8 courses per year will count for credit, but students may elect to take 5 courses in any term. All count equally in determining the academic average. Permission to complete the work for the degree while registered in absentia may be granted under certain conditions on application to the Committee on Programs and Academic Standing.

GRADING SYSTEM

Academic standing and eligibility for graduation are determined by the quantity and quality of the student's work. Quantity is estimated by the number of courses completed. Quality of work is indicated by the following grades: A or A—, excellent; B+, B, B—, good; C+, C, C—, fair; D, poor; F, failure, and P, passed without a specific grade. Work of unusual merit in the major field is awarded the grade Passed with Distinction.

A course is marked Incomplete (Inc.) if the student has filed with the instructor his written permission for the postponement of required work; Absent (Abs.) means absent from the final examination; Deferred (Def.) means the grade has been deferred because of illness during the examination; the entry Y-C

DEGREE REQUIREMENTS

signifies that the grade on completion of the second term will apply to the first term as well; WD/F signifies withdrawal from a course without formal notification.

Upperclassmen may elect a pass-fail grade in courses not necessary to satisfy the requirement in the major, providing twenty-eight of the thirty-two courses required for graduation are taken for letter grade credit. Freshmen may not elect a pass-fail grade except in the spring semester and then only for a fifth course.

In computing averages, each course with a mark of A=4; B=3; C=2; D=1; F=0. For every plus or minus unit an adjustment of +0.3 or -0.3 is made. In order to be recommended for the degree a student must maintain a cumulative average of 2.00 (C) for her entire course and for her senior year specifically. At the end of each term all records are examined. Normally only those students whose cumulative average is 2.00 or above are permitted to remain in college. The continuance in college of students whose work falls below this average depends upon promise of future development and is determined by the Committee on Programs and Academic Standing.

Work of D grade is not counted in the major field, although it is included in the average for the major.

REQUIREMENTS FOR TRANSFER STUDENTS

Before registration the transfer student receives an estimate of the credit she may expect for work she has done at her previous college. She plans her program with her adviser using the estimate as a guide to the required work to be completed.

All transfer students (except foreign students) are considered to have satisfied the requirement of English A1. Those who subsequently appear to have deficiencies in English will be advised to take further work.

Transfer students may be automatically exempted from the Foreign Language Requirement on the basis of their College Entrance Examination scores alone, or on the basis of the combination of those scores and the number of semesters of the language studied at another college. Those who are not exempted will be placed in the appropriate course leading to fulfillment of the requirement.

A maximum of 8 courses toward the Barnard degree is allowed for one year's work elsewhere. Sixteen of the courses to be counted toward the degree must be taken at Barnard, including a minimum of 6 courses in the major field.

Transfer students are subject to the regulations governing summer study as set forth on page 41.

VI. General Information

REGISTRATION

Class advisers for the freshman and sophomore years and major advisers for upperclassmen are appointed from the teaching staff and are prepared to give information and advice. For the year 1970-71 the class advisers are:

Advisers to the Class of 1973 MR

MRS. GRACE KING

MRS. LOUISE G. STABENAU

Advisers to the Class of 1974

MRS. LYDIA H. LENAGHAN
MRS. RUTH L. RUTSCHMANN

MRS. MAIRE SAID

Registration for all students takes place in 306 Barnard Hall, as follows:

Autumn Term

Tuesday, September 22 a.m. All returning juniors.

p.m. All returning seniors.

Wednesday, September 23

a.m. All returning sophomores, and all

transfer students.

p.m. All freshmen, and all readmitted

students.

Spring Term

Monday, February 1 a.m. Freshmen

p.m. Sophomores

Tuesday, February 2 a.m. Juniors

p.m. Seniors, February transfer and re-

admitted students.

Registration is not complete and classes cannot be attended until all fees, including those for residence, are paid. A fee of \$15 is charged for failure to register at the scheduled time. (See also Payment of Fees, page 199.)

No student will be permitted to register after Friday, October 2, in the Autumn Term and Friday, February 12, in the Spring Term.

No student may be registered simultaneously in any other school or college without the consent of the Dean of Studies.

LANGUAGE PLACEMENT EXAMINATIONS

Placement examinations will be given on the Monday preceding registration for a) students who have studied the pertinent language but have no College Entrance Examination Board scores; b) students who have taken summer school

GENERAL INFORMATION

courses equivalent to or below the level of a Barnard 4 course; c) any student who so desires, it being understood that she will abide by the results of the test.

ACADEMIC DISCIPLINE

The continuance of a student upon the rolls of the College, the receipt of academic credit, graduation, and the conferring of a degree or certificate are subject to the disciplinary powers of the College. Any registration may be cancelled at such time and upon such grounds as the College shall in its sole discretion determine.

ATTENDANCE

All students are expected to attend classes regularly. Students who absent themselves from classes must expect the quality of their work to be affected, with consequent detriment to their academic standing. Frequent or prolonged absences from the College without a compelling reason such as illness will cause a student to forfeit the right to make up work or take final examinations.

All absences due to illness must be reported on forms available in the Office of the College Physician. Illness is considered an excuse for absence only if the student's statement is filed immediately upon her return to college.

Barnard is a nondenominational college. Students who are prevented by conscientious scruples from complying with academic requirements on days set apart for religious observance should discuss this problem with their religious counselor.

WITHDRAWAL

A student not subject to discipline for infraction of College rules may withdraw from the College with an honorable discharge. Notice of intention to withdraw must be given in writing on forms obtained from the Office of the Dean of Studies. If the student is under twenty-one the forms must be signed by a parent or guardian. Failure to submit the proper notification on the part of a student who withdraws while College is in session may result in a report of WD/F for the term's work.

LEAVES OF ABSENCE

Requests for leaves of absence should be addressed to the Dean of Studies on forms to be obtained from her office. A student in good standing may be granted a leave of absence for one term or two consecutive terms only, for personal reasons, e.g., health, marriage, financial necessity, or for study abroad. Completed application for leave of absence must be received prior to the term(s) to which it applies: by July 1 for the Autumn Term; by December 1 for the Spring Term.

CLASSIFICATION OF STUDENTS

Students are classified as follows:

Freshmen: those who have completed fewer than 6 courses

Sophomores: those who have completed 6 courses

Juniors: those who have completed 14 courses

Seniors: those who have completed 24 courses

Unclassified: those who have not yet been assigned definite credit

on transfer

Nonmatriculated: those who are not candidates for the degree

No matriculated student may change her status to that of nonmatriculated student.

CHANGE OF PROGRAM

Students may change the programs for which they have registered through Friday, October 2, Autumn Term, and Friday, February 12, Spring Term. After that date, changes of program are subject to the following regulations:

Section Changes. Sections may not be changed except at the written request of the instructor.

Adding Courses. No course may be added for any reason.

Dropping Courses. A course may be dropped with the written approval of the class adviser (for freshmen and sophomores), the major adviser (for juniors and seniors), or the College Physician. After a fixed date (Friday, December 11, Autumn Term; Friday, April 9, Spring Term), no course may be dropped except with the approval of the Dean of Studies, and then only for reasons of serious personal emergency.

Audited Courses. No change from a noncredit to a credit basis may be made under any circumstances after the final date for adding a course. Permission of the instructor is required to audit a Barnard course. For Columbia courses, forms must be obtained from the Registrar.

COLUMBIA UNIVERSITY COURSES

Under certain conditions courses in other divisions of the University may be elected when an equivalent course is not offered at Barnard.

Graduate School of Arts and Sciences: With the approval of the major adviser, graduate courses in the major field are open without additional fees to qualified upperclassmen who need this work to achieve their objective in the major. For graduate courses outside the major field, the student must pay the additional fees unless waiver of the fees is recommended by the major adviser and granted by the Committee on Programs and Academic Standing. Approval of the Chairman of the Department concerned is also required.

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Seniors with high academic standing may apply for permission to count up to 24 points of graduate work in the major field toward the graduate degree.¹

Those who wish to register for graduate courses to count toward a higher degree must comply with the following conditions:

- 1. The approval of the chairman of the Barnard and Columbia departments, the Graduate Admissions Office, and the Committee on Programs and Academic Standing must be obtained in advance and filed in the Registrar's Office.
- 2. The student must be in her senior year.
- 3. The program for the term must not be in excess of 5 courses.
- 4. The courses for graduate credit must be over and above the 32 courses required for the A.B. degree.

Columbia College: Certain courses at Columbia College may be elected, in addition to those in this announcement. Those who wish to register for them must obtain written approvals on forms to be obtained in the Registrar's Office.

School of General Studies: Courses in the School of General Studies which are not listed in this announcement may be elected with the approval of the class or major adviser and the Committee on Programs and Academic Standing upon application to the Registrar's Office. They will be credited toward the degree if passed with a grade not lower than C. Fees for General Studies courses not listed in the Barnard announcement are paid for by the student herself over and above the Barnard tuition, with the following exceptions:

- 1. Courses which are essential to the major for which the approval of the major adviser and the Committee on Programs and Academic Standing is obtained.
- 2. Language courses not offered at Barnard, under special conditions to be reviewed by the Committee on Programs and Academic Standing.
- 3. Courses certified by the chairman of a department as essential to a program of work to be taken at Barnard in a particular field under the direction of the department.

Teachers College: Certain courses may be taken by qualified seniors with the consent of the Dean of Studies and the Registrar of Teachers College. Except for seniors in the Barnard education program, fees for these courses are not included in the regular tuition, but are added to the Barnard bill.

SUMMER STUDY

A student will normally be expected to spend four years completing the work for the degree; however, with prior approval of acceleration by the Committee

¹ Financial aid is not applicable to fees for such work.

on Programs and Academic Standing or permission to make up a course dropped or failed during the term, up to 4 courses may be taken in summer session for credit. Summer study may be used for the satisfaction of prerequisites or for the fulfillment of requirements.

The entire summer program must be approved in advance in writing, first by the class or the major adviser, and secondly by the chairman of the appropriate Barnard department. Programs must be approved and submitted to the Registrar before the last day of the Spring Term. Official reports of grades must be filed with the Registrar not later than October 15. Grades of Absent or Incomplete will not be honored after that date.

Not more than two one-semester courses may be elected in any one summer session.

Courses of less than six weeks' duration are credited only in exceptional cases.

No course with a grade lower than C will be credited toward the degree.

Grades will not be included in the Barnard average.

EXAMINATIONS

Examinations are scheduled at the end of each term. For the academic year 1970-71 they will be held January 18-28, inclusive, and May 17-27, inclusive.

Deferred examinations, given in September and March, are open only to those students whose work is satisfactory and who were absent from the regular examinations for reasons of illness or family emergency. Exceptions to these conditions can be made only by petition to the Committee on Programs and Academic Standing before the regular examination period begins.

Absence for reasons of health on the day of an examination should be reported to the Office of the College Physician.

Examinations missed in January are to be taken the following March or, in cases of prolonged illness, in September of the same year. Those missed in May are to be taken in September of the same year. If a student absents herself without a valid excuse from a final or deferred examination, she will receive a grade of zero for that examination. A fee of \$5, payable in advance, is charged for each deferred examination. A senior who has missed an examination at the end of her last term may apply for a special examination for which the fee is \$10, payable in advance.

Tentative examination plan

The following plan shows the pattern normally used in making up the examination schedule; it is necessarily subject to change. In the periods left open, groups 10 through 17 are arranged so as to avoid conflicts for Barnard students taking Columbia examinations scheduled at these times.

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FIRST WEEK

A.M.	MON.	TUES.	WED.	THURS.	FRI.
Group Class		8 TuTh 11	1 MWF 9	6 TuTh 9	3 MWF 11
Hour					2/1//1
P.M.	MON.	TUES.	WED.	THURS.	FRI.
Group	5				
Class	MWF 2				
Hour					
SECON	ND WEEK				
SECON	ND WEEK MON.	TUES.	WED.	THURS.	FRI.
		TUES.	WED.	THURS.	FRI.
A.M.	MON.		WED.	THURS.	FRI.
A.M. Group	MON.	. 7	WED.	THURS.	FRI.
A.M. Group Class	MON.	. 7	WED.	THURS.	FRI.
A.M. Group Class Hour	MON. 2 MWF 10	7 TuTh 10			

QUIZZES

Hour

Instructors are not required to give make-ups to those absent from previously announced quizzes. In case an instructor is willing to give a make-up quiz, he is authorized to do so only if the student has submitted a medical certificate of illness approved by the College Physician, or evidence of other extenuating circumstances acceptable to the instructor.

DEGREES

Students are recommended by the Faculty of Barnard College to the Trustees of Columbia University for the degree of Bachelor of Arts. Degrees are granted in June, October, and February. A statement of intention to complete the work for the degree on any one of these dates must be filed with the Registrar at the announced time. (See College Calendar pages 7 and 8.)

HONORS

The Faculty confers honors upon students who complete work for the degree with distinction (cum laude, 3.25), with high distinction (magna cum laude, 3.50), and with highest distinction (summa cum laude, 3.75). Students whose records include work done at another institution will be eligible for honors if both the over-all and the Barnard average meet this requirement. Departmental honors are awarded to graduates who are recommended by their departments as having done distinguished work in their major fields.

DEAN'S LIST

A Dean's List, which contains the names of students who deserve special mention for superior scholarship, is compiled at the end of each academic year. A program of no fewer than 3 courses each term and an average of 3.40 for the year are required. Announcement of the list is made the following October.

PHI BETA KAPPA

The Barnard section of the Columbia University chapter of Phi Beta Kappa was founded in 1901. Election to the national honor society is a recognition of scholarship, and Barnard students of exceptionally high standing are eligible. Questions concerning Phi Beta Kappa should be referred to the Office of the Dean of Faculty.

THE HONOR SYSTEM

An integral and pervasive aspect of academic life at Barnard College is the school's Honor System, instituted in 1912. Under it, a student is expected to maintain responsibility for her own conduct and to show consideration for other members of the community in academic matters. Thus examinations are unproctored and the library employs no guarding system. In addition, this code of responsibility for oneself and to the community applies to such areas as the signing of class attendance sheets and the preparation of assignments. Administration of the Honor Code and any infractions of it which may occur are dealt with by the Honor Board, ultimately, however, the success of the Honor System depends on the integrity of each individual Barnard student.

HEALTH

The College Physician is responsible for the health of the college community. She is assisted by one part-time physician, a psychiatrist, two psychiatric counselors, and two nurses. Medical examinations at regular intervals are obligatory: December 15 is the final date for seniors for the completion of their examination; May 15 for freshmen. Students will not be permitted to register for the succeeding term until they have had this examination.

All students, residents, nonresidents, and commuters, must immediately report any illness, however minor, to the Medical Office. If resident students wish to have someone other than the College Physician care for them, their parents must address a request to the College Physician and send her the name and address of the doctor before registration.

HOUSING

Traditionally, Barnard has attracted students from all over the world as well as from its own community, New York City, and its suburbs. At present the

GENERAL INFORMATION

College has academic facilities for 1900 students, of whom approximately 1077 can be housed in the campus residence halls and the Barnard cooperative apartment residences adjacent to the campus. Additional rooms are assigned by the College in other residences near the campus.

The Director of Residence must know before academic registration each term where every student is living and must have any permission forms required of the student complete and on file. Any student who wishes to change her address at any time after her first registration for a given academic term (even when returning to her legal home) must file with the Director of Residence her new address and necessary permission.

To arrange for off-campus housing, the parent or legal guardian must sign a Nonresident Housing Permission Card stating that he or she takes full responsibility for the student's health, safety and finances. Permission is official when the card is on file at the College. The College strongly recommends that two or more students live together. Should a student return to her legal home, she must notify the Director of Residence.

HOUSING CLASSIFICATIONS

Students are classified as residents, nonresidents, or commuters when they enter Barnard. This classification is based on the distance of a student's home from the College and may change: 1. if the legal residence changes (i.e., the residence of the parent or legal guardian for students under 21); 2. in case of nonresidents, if they are assigned a room in one of the residences owned and operated by the College; 3. in case of residents, if they move off campus.

Resident

A resident is a student whose legal home is outside the commuting area and who is assigned a room by the Director of Residence in one of the residences owned and operated by the College.

Nonresident

A nonresident is a student whose legal home is outside the commuting area who is not assigned space in one of the residences owned and operated by the College. The parent or legal guardian must submit a written request for off-campus housing (any housing arrangement not within a Barnard owned and operated residence) to the Director of Residence by September 1 for the Fall Term and by January 15 for the Spring Term. When the student accepts a room in college housing, her housing classification changes to that of resident.

Commuter

A commuter is a student whose legal home falls with the geographic area prescribed by the College as the commuting area. Commuters are eligible for

College-assigned housing when space is available. Assignments are on a semester basis. Commuters are not reclassified as residents. Priority is based on commuting difficulty and distance and on date of application. If a commuter is given special permission for off-campus housing, her name will be removed from the waiting list for College-assigned rooms unless she specifically requests that it should remain.

HOUSING FACILITIES

College-Owned and Operated Residences

- 1. BROOKS, HEWITT and REID HALLS, supervised dormitories at 3001 Broadway, are operated as one complex with space for approximately 510 students from all classes. Rooms are singles and doubles. Freshmen are usually assigned to double rooms. All students living in these halls are required to subscribe to the College food plan. Assignments are made by the Director of Residence according to the following priority: incoming resident freshmen and resident upperclassmen; resident students returning from leaves of absence; nonresidents who have permission to change their status to residence; and commuters who by special permission may live on a temporary, semester basis in the dormitories without a change of housing status. Rooms are \$625 a year, board \$500 a year.

 2. 616 West 116th Street, an apartment-style supervised residence directly across the street from the other halls, provides housing for 212 upperclassmen in suites of single and double rooms accommodating five to six girls. Each suite has a kitchen and bath. Rooms are \$675 a year, and subscription to the food plan is optional.
- 3. PLIMPTON HALL, an apartment-style supervised residence on Amsterdam Avenue and West 121st Street, a short walk from the main campus, provides housing for 280 upperclassmen in suites of 5 single rooms. Each suite has a kitchen and bath. Rooms are \$725 per year, and subscription to the food plan is optional.

College-Reserved Space Assigned by the Director of Residence

- 1. 620 West 116th Street. Barnard College has limited space available in this recently purchased apartment building. There is no resident supervision. Seniors have first priority for this space. Rooms are \$675 per year.
- 2. THE FAIRHOLM, 503 West 121st Street, is a residence owned and operated by Teachers College of Columbia University. Students have their own keys. Assignments are made by the College to commuters and nonresidents who have parental permission. Barnard contracts for single rooms in self-contained suites. Prices range from \$440 to \$572 per year.
- 3. HOTEL PARIS, West End Avenue at 97th Street is convenient to buses and subway and is about 10 minutes away from the main campus. Barnard students may contract for rooms, each with private bath. Graduate assistants are available to students in case of emergency. The cost is \$700 per year.

GENERAL INFORMATION

Off-Campus Housing Available to Students

The Barnard College Housing Office maintains listings of vacant off-campus apartments and rooms. The College, however, can take no responsibility for the recommendation of these facilities, since they are not inspected by College officials, nor are their owners necessarily known to the College.

FINANCIAL AID FOR ROOM AND BOARD

Barnard students whose academic records and financial situation make them eligible for financial aid from the College for living expenses will have the cost of board and room considered in the award when they are residents in Brooks, Hewitt, Reid, in 616 West 116th Street, or in 620 West 116th Street, and on the College meal plan. Students in 616, 620 or Plimpton Hall not on the College meal plan, as well as students assigned to the Fairholm or Paris Hotel, who are eligible for financial aid will have their need determined by the room rent and the cost of raw food.

MARRIED STUDENTS

Students who plan to marry during the academic year and continue in college are asked to notify the Dean of Studies. Married students, as a rule, will not be allowed to remain in the college residences. They will be subject to the financial obligations which pertain to any student who withdraws from the residence halls or from the College during the term.

OFFICE OF PLACEMENT & CAREER PLANNING

The Office of Placement and Career Planning offers assistance to students and alumnae in planning for and obtaining full-time, part-time, and summer positions. Through personal interviews, analysis of interests and experience, and reference to career information and resources, its staff helps students and alumnae make appropriate choices with regard to immediate needs and long range goals.

The Office, which is open throughout the year, keeps in touch with the needs of employers through the hundreds of jobs referred to the College. Each year several thousand requests for credentials are handled for seniors and alumnae. The staff does research on those fields of special interest to Barnard students and alumnae and arranges meetings to discuss specific career opportunities with professionals. In addition the Office plans conferences and meetings on a variety of broad vocational concerns.

About 50% of Barnard students do some paid work during the school year. The Office of Placement and Career Planning lists part-time jobs, for on and off campus, ranging from manuscript typing to dog walking to teaching exercise classes. The Office supervises the Barnard Babysitting Service which receives over five thousand calls for babysitters each year. Students' average term-time

earnings range from about \$250 to \$550 with freshmen earning least. Freshmen are referred to part-time jobs for no more than 10 hours per week their first semester.

Approximately 75% of Barnard students work during the summer. Average earnings for full-time summer jobs range from \$600 to \$900. The Office helps students find summer jobs, provides information on special programs and internships, and contacts other potential summer employers.

VII. Courses of Instruction

The College reserves the right to withdraw or modify any course or to change the instructors as may be necessary.

Course descriptions will be found in the following pages. More information may be obtained from the chairman of the departments at registration periods and during the academic year.

Room assignments are printed on separate sheets and distributed during registration.

Autumn Term courses are marked by odd numbers, Spring Term courses by even numbers, year courses by consecutive odd and even numbers. An even number followed by **x** indicates a course given in the Autumn Term. An odd number followed by suffix **y** indicates a course given in the Spring Term.

Indivisible courses which run throughout the year are marked with a hyphen between the numerals (Art History 1-2). No credit is given for work in an indivisible course dropped at midyear without the written consent of the instructor and the departmental chairman and the approval of the Committee on Programs and Academic Standing.

Divisible courses which run throughout the year are marked with a comma between the numerals (Anthropology 1, 2). The first half of such courses may be taken separately. Admission to the second half without completion of the first half is granted only if written permission of the instructor is obtained.

Courses are arranged in examination groups to avoid conflicts on the examination schedule. The groups are indicated by boldface numerals following the course title (English Composition [0]). Group 0 includes courses which ordinarily do not have set examinations. No student may elect two courses in the same examination group, other than Group 0, without a written statement from one or the other instructor that a conflict examination will be given. This statement must be filed by the student in the Registrar's Office. A complete list of courses by examination groups is given on pages 233-235.

The following alphabetical prefixes designate the division of the University for whose students the course is primarily offered or indicate joint courses.

C — Columbia College

F — School of General Studies

G — Graduate Faculties

R — Program in the Arts

V — Joint undergraduate course with Columbia College and/or the School of General Studies

W — Other inter-faculty course

The level of the course in general is indicated as follows:

1000-3999 Undergraduate

4000-5999 Graduate, open to qualified undergraduates

6000-8999 Graduate, normally not open to undergraduates

The symbol x follows the number of a course given in the Autumn Term; the symbol y follows the number of a Spring Term course.

INTERDEPARTMENTAL OFFERINGS

I. FOREIGN AREA STUDIES

This program is supervised by the Committee on Foreign Area Studies: SERGE GAVRONSKY, Associate Professor of French
JOHN MESKILL, Associate Professor of Chinese and Japanese, Chairman RANDOLPH D. POPE, Instructor in Spanish
ABRAHAM ROSMAN, Associate Professor of Anthropology
BARRY ULANOV, Professor of English
CHILTON WILLIAMSON, Professor of History

The purpose of Foreign Area Studies is to provide an introduction to the study of some one foreign region or country of the world. The work is divided into three elements: language, a scholarly discipline, and a diversified approach to a region. The student who wishes to major chooses one of the following programs:

- A. Asia (Adviser: Professor Meskill) See Oriental Studies, page 151.
- B. Latin America. (Adviser: Mr. Pope)
 - (a) Spanish 14. Spanish-American Culture and one more course on Latin American history.
 - (b) Spanish 31-32. Spanish-American Literature, or Spanish 31 and Spanish 11. Significant Themes of Contemporary Latin American Literature.
 - (c) Four more courses, of which two should be in one department and above the introductory level, chosen with the help of the adviser.
 - (d) Two courses of the Latin American Seminar (C3811x-C3812y).
- C. Russia. (Adviser:)
 - (a) Two courses in Russian history.
 - (b) Two courses in Russian literature above the language requirement level.
 - (c) Four more courses on Russia, chosen with the help of the adviser.
 - (d) Three courses, chosen from appropriate colloquia and senior seminars in consultation with the adviser.
 - (e) A reading knowledge of Russian adequate for research in the senior seminar.
- D. Western Europe. (Adviser: Mr. Woodbridge).
 For program on England, see British Civilization, page 52.
 For other Western European countries:
 - (a) Two courses in History, surveying major developments in European experience.
 - (b) Two courses in the literature of one country, in the original language.

INTERDEPARTMENTAL OFFERINGS

- (c) Four more courses on the same country, chosen with the help of the adviser.
- (d) Two courses of senior seminar, usually in History.

The senior requirement varies according to the region studied. Majors should consult their adviser for details.

A major in Foreign Area Studies is open to a limited number of qualified students whose applications are approved by the committee in charge. Freshmen and sophomores anticipating such a major should consult their class advisers and the officer in charge of Foreign Area Studies as early as possible. Application should be made in writing to the officer in charge by March 1 of the sophomore year.

AMERICAN STUDIES

II.

This program is supervised by the Committee on American Studies: Basil Rauch, Professor of History
Annette K. Baxter, Associate Professor of History, Chairman Barbara Novak, Associate Professor of Art History
Christine Royer, Instructor in English

The purpose of the program is to develop understanding of American civilization considered as a whole. The results of specialized study in all fields of learning dealing with American subject matter are assembled for the work of the senior seminar.

A major in American Studies: In order to acquire a broad understanding of American civilization and acquaintance with various methods of studying it, a student who majors in American Studies must take a program, planned in consultation with her major adviser, which includes the following:

- (a) Two courses selected from among ancient, medieval, or European history in any combination.
- (b) Two courses in American history.
- (c) Two courses in social science dealing primarily or partly with American subject matter.
- (d) Two courses in humanities dealing primarily or partly with American subject matter.
- (e) In the junior year American Studies 1-2, and in the senior year American Studies 3-4.

A research essay to be prepared in the senior seminar is required in lieu of the major examination.

1-2. Junior Readings.

[0]

Students will read selected classics and examples of contemporary scholarship in American Studies. The aim of the course is to prepare the student to discuss and write critically on interdisciplinary works. May be entered either semester. Open to non-majors with permission of the instructor. Professor Baxter. Biweekly meetings. Th 3:35-5:15.

3-4. Senior Seminar.

[0]

Individual research on diverse aspects of American civilization, in consultation with the instructors, and presentation of results in the form of the senior essay. Professors Rauch and Baxter. W 4:10-6 and frequent conferences.

III. BRITISH CIVILIZATION

This program is supervised by the Committee on British Civilization: Stephen E. Koss, Associate Professor of History, Chairman David A. Robertson, Jr., Professor of English Eleanor Rosenberg, Professor of English Chilton Williamson, Professor of History George Woodbridge, Associate Professor of History

Open to students who are interested in an interdisciplinary approach to learning within a broad general area. Particularly emphasizes historical and literary traditions of British Civilization, but is comprehensive enough to include specialized interests in the fields of imperial and commonwealth studies.

A student who wishes to major in British Civilization must obtain the approval of the chairman of the committee. She should plan, in consultation with her adviser, a program of study which will include:

- (a) Four half-year courses in history;
- (b) Four additional half-year courses, of which two must be in English literature;
- (c) A senior seminar (two terms) in history or English.

Senior requirement: A thesis, the length and standards of which will be set by the committee. Junior majors should consult with their advisers during the Spring Term about placement in pertinent senior seminars.

In 1970-71 a section of English 40, open to students of all classes, will study recent literary treatments of selected British institutions.

IV. ENVIRONMENTAL CONSERVATION AND MANAGEMENT

This program is organized and administered by a committee of members of the Departments of Biology, Geography and Geology.

Patricia L. Dudley, Associate Professor of Biology David W. Ehrenfeld, Assistant Professor of Biology Donald D. Ritchie, Professor of Biology John E. Sanders, Professor of Geology Leonard Zobler, Professor of Geography, Chairman

This program acquaints the student with a set of issues that are crucial to the survival of mankind and begins the development of the means to cope with them. These issues concern the adequacy of the earth's natural resources to sustain an environment of quality when confronted by the pressures of the current urban-technologic-population explosion.

INTERDEPARTMENTAL OFFERINGS

Their combined effects threaten the natural environment with profound and possibly irreversible disturbances and question western man's land ethics.

The goals of the program are: (1) to train and equip students with the requisite skills, values, and attitudes to enable them to participate in the work of designing, establishing, and maintaining a viable ecologic habitat for man, and (2) to promote the development of research skills in environmental science. The concept of the ecosystem lends unity to the multidisciplinary character of environmental studies.

The academic program is designed around the idea that man's ecosystem is the set of interacting relationships among the physical, biological, and cultural forces that govern the human realm. Coherence is provided by core courses followed by in-depth studies along one of several subject matter or managerial tracks. The core courses are: General Biology (Biology 1), Ecology (Biology 8), Environmental Science (Geography 1, 2), and Conservation Theory (Geography W4014y). In addition, a cluster of conservation courses on field work, readings, lab projects, and internships has been developed. Students may opt to follow a managerial or a scientific program. Model programs are available from the committee. The core plus five advanced electives, one of which shall be a seminar, satisfy the major requirements. Examples of specialized paths are: biological conservation, environmental and physical resources, coastal zone, urban and suburban planning, nature center operation. Details are available from committee members.

11. Colloquium.

Readings, discussions, reports on selected facets of the literature of man's relation to the environment. Occasional invited guests. Hours to be arranged.

45. Environmental Monitoring.

The analysis of the properties of air, water, and soils with special reference to nutrient cycles, and the accumulation of pollutants. Introduction to environmental quality control monitoring principles, instrumentation, and systems. Permission of the instructor is required. Hours to be arranged.

51, 52. Environmental Projects.

Special study projects in environmental science, field research, internships, and environmental issues of interest to the student. Individual arrangements with a member of the faculty.

62. Nature Center Management.

The design, organization, and operation of natural resource and environmental education centers. Community program planning. Permission of the instructor required. Hours to be arranged.

69, 70. Seminar.

Reports and discussions of current individual or joint research. COM-MITTEE MEMBERS. Hours to be arranged.

Biology 4. Natural History of the New York Area.

Biology 17. The Biology of Urbanization.

Biology 18. Biological Management in Cities.

Geography 31. Environmental Policy.

Geography 32. Transportation and Land Use.

Geography 34. Environmental Planning and Perception.

V. MEDIEVAL AND RENAISSANCE STUDIES

(two separate programs)

Officer in charge, Professor Lorch.
Representative for Columbia College, Professor Malcolm Bean

This program is supervised by the Committee on Medieval and Renaissance Studies:

James H. Beck, Associate Professor of Art History Tatiana Greene, Associate Professor of French Eleanor Rosenberg, Professor of English George Stricevic, Assistant Professor of Art History Suzanne F. Wemple, Assistant Professor of History (Adviser) Barry Ulanov, Professor of English

The purpose of this program is to provide an understanding of Medieval and Renaissance civilizations on the basis of interdisciplinary studies. Students will take related courses in various departments. The programs will be set up *individually* with particular emphasis on one of the disciplines: art history, history (which will combine Medieval and Renaissance Studies), one or more of the literatures, philosophy, romance philology, music, or religion.

Prerequisite for Medieval Studies: History 3. The Early High Middle Ages and History 4. The Middle Ages.

Prerequisite for Renaissance Studies: History 4. The Middle Ages and History 13y. The Italian Renaissance in the Fifteenth and Sixteenth Centuries, or depending on the field of concentration) History 13y. The Renaissance, and History 14. The Reformation in Europe in the Sixteenth Century.

Language requirement for Medieval Studies: A reading knowledge of one Romance or Germanic language. In special cases students may petition for another language. Students are expected to acquire a reading knowledge of Medieval Latin before graduation. (See Course 13, 14)

Language requirement for Renaissance Studies: A reading knowledge of two languages, preferably Latin and Italian, must be acquired before graduation.

Required courses: A minimum of eight one-semester courses within the general area of Medieval or Renaissance civilization, selected from a list issued by the chairman. Of these, at least three or four must be advanced courses in the field of concentration.

INTERDEPARTMENTAL OFFERINGS

COURSES GIVEN UNDER THE SPONSORSHIP OF THE COMMITTEE

Introductory Seminar.

1.

[0]

Readings will include both primary and secondary sources, Medieval and Renaissance authors in translation, and contemporary art historians, philosophers, and literary critics.

Topic for 1970-71. The survival and revival of Rome. An introduction to Medieval and Renaissance studies through the analysis of Roman subjects and themes in history, the literature, art, and philosophy. Students will be guided in the writing of an essay. Dr. Russell, Mr. Rao, and staff. M 4:10-6.

13, 14. Readings in Medieval and Renaissance Texts in the Original. [13]

Medieval and Renaissance Latin authors. Dr. Kostka. Tu Th 5:15-6:35.

90. Senior Colloquium.

[0]

Examination of major themes in Medieval and Renaissance civilization.

Topic for 1970-71. The Apocalypse in history, literature, and art. Professors Robert Somerville, George Stricevic, Barry Ulanov. W 4:10-6.

These courses are given primarily for students in the program but should places remain open students with the interest and necessary preparation will be admitted upon interview with a member of the committee.

VI. URBAN STUDIES

This program is supervised by the Committee on Urban Studies:

BERNARD BARBER, Professor of Sociology

DEMETRIOS CARALEY, Professor of Political Science

(Chairman; 409 Lehman)

JEAN GOOCH, Assistant Professor of Economics

PATRICIA A. GRAHAM, Associate Professor of Education

BASIL RAUCH, Professor of History

PAULA G. RUBEL, Associate Professor of Anthropology (Secretary)

BARRY ULANOV, Professor of English

LEONARD ZOBLER, Professor of Geography

The purpose of urban studies is to develop understanding of the basic processes, institutions, problems, and achievements of city life. A major in urban studies can be taken only in conjunction with a concentration in one of the regular departments. Normally the student should choose as major adviser the member of the committee from the department in which she intends to concentrate.

The major seeks, first, to expose the student through departmental and interdepartmental courses to the concepts and findings of a broad

¹ Absent on leave, 1970-71.

variety of disciplines as they bear on urban subject-matter; and second, to encourage the student to acquire the techniques and habits of scholarly investigation through pursuit of more advanced and concentrated work in some particular urban-related discipline including the writing of a senior thesis.

The requirements for a major in Urban Studies are:

- (a) One course dealing primarily with urban subject-matter from a list approved by the committee in each of three of the following departments: anthropology, economics, history, political science, sociology.
- (b) One course dealing primarily with urban subject-matter from a list approved by the committee in each of two other departments, such as art history, English, geography, psychology, biology, architecture, urban planning.
- (c) In the junior year Urban Studies 45-46, and in the senior year Urban Studies 64.
- (d) Satisfactory completion of a concentration in one of the participating departments consisting of not fewer than five courses and the writing in that department of a senior thesis on an urban topic to be approved by the committee.

Note: A list of the specific courses that are approved for fulfilling requirements (a) and (b) and of the departments that offer concentrations for urban studies majors is issued periodically by the committee.

45-46. Junior Colloquium.

[0]

Readings from various disciplines, discussions, and reports focusing on the history and achievements (Autumn Term) and the contemporary problems (Spring Term) of city life.

Autumn Term: Professor Rauch and Miss Howe. Spring Term: Mr. Feld and Miss Howe. Section I Tu 2:10-4 Section II Th 2:10-4.

63. Urban Workshop Seminar.

[0]

Readings, discussions, and reports on the organizational processes of urban institutions and their impact on urban life and conditions. A required part of the course is actual work experience in governmental or private urban agencies. Prerequisite: Senior standing and registration with the urban studies administrative assistant during spring preregistration. Open to non-majors only by permission of the instructor. MISS HOWE. Bi-weekly meetings. M 2:10-4.

64. Senior Colloquium.

[0]

Readings and discussions on emerging trends in and prospects of cities. Reports on research being conducted for the senior thesis. MISS HOWE. Section I M 2:10-4 Section II Tu 2:10-4.

ANTHROPOLOGY

PROFESSOR: MORTON KLASS

VISITING PROFESSOR: MARY HAAS (Linguistics)

ASSOCIATE PROFESSORS: ABRAHAM ROSMAN (Chairman; 411A Milbank

Hall), PAULA G. RUBEL

ASSISTANT PROFESSORS: BETTE S. DENITCH, JOAN E. VINCENT

OFFICERS OF COLUMBIA UNIVERSITY OFFERING COURSES OPEN TO BARNARD STUDENTS:

PROFESSORS: MARVIN HARRIS, ELLIOT P. SKINNER, CHARLES M. WAGLEY

ASSOCIATE PROFESSOR: ALEXANDER ALLAND, JR.

Assistant Professors: George C. Bond, Alan W. Johnson

LECTURERS: SHIRLEY S. GORENSTEIN, ROBERT STIGLER

Anthropology is the study of the biological and cultural development of man, and of the contemporary variety of human societies and their cultures. The student majoring in this field will develop a perspective on man and his ways that is not bound by her own time and culture, and she will find herself drawing upon the literature of such different disciplines as genetics, archaeology, ethnography, linguistics, and the social sciences. While the study of anthropology contributes to a liberal arts education, the student will also receive adequate preparation for further study in graduate school, or for employment in the growing field of applied social change.

Every major is expected to have a general knowledge of all the fields of anthropology and of their interrelationship. Anthropology 1, 2 is required of all majors as a prerequisite to advanced work in the subject. All majors are also required to take Social Organization (V3011). Courses in archaeology, linguistics, physical anthropology and ethnographic areas are strongly recommended for majors. In the junior year, a major will take Anthropology 41 and 42, and in her senior year Anthropology 51-52, a seminar for independent research.

Several major museums and libraries in New York offer exceptional opportunities for research. Various summer schools offer opportunities for research in archaeology and ethnography, and under certain circumstances such work may be credited toward the Barnard degree. Students interested in cultural anthropology will be encouraged, whenever possible, to conduct actual research among ethnic groups in the New York area or, during their summer vacations, in other localities.

In lieu of a major examination, each student in the required senior seminar (51-52) will write a senior essay.

BASIC COURSES

1, 2. Introduction to Anthropology.

[6]

The nature and diversity of man, his societies and cultures. Autumn Term: The problem of cultural diversity. The issue of race. Biological and cultural development examined in terms of evolutionary and ecological theory and through the archaeological record.

Spring Term: The universals of culture. Language. Comparative study of social, economic, and political organization, of religion, the arts and the individual; introduction to ethnological analysis and field research. The prerequisite for Anthropology 2 is Anthropology 1. Open to freshmen. Professor Klass. Tu Th 9:10-10:25.

V3201x. Physical Anthropology.

Evolutionary theory, population genetics, race, human paleontology and primate behavior. Professor Alland. Tu Th 2:40-3:55.

Linguistics 21, 22. Introduction to Linguistics.

[5]

The nature of language. Characteristics of phonological and grammatical systems of the lexicon. Evolution of language. Role of linguistics in related disciplines. Modern techniques of linguistic analysis. Linguistics 21 is prerequisite to Linguistics 22. Professor Malone. M W F 2:10.

INTERMEDIATE COURSES

V1004x. Peoples of Africa.

Survey of African cultures, with intensive analysis of selected tribes and regions. Professor Skinner. M W 11-12:15.

[V1024x. Ethnology of Eurasia.

PROFESSOR DENITCH.

Not given in 1970-71.]

[V1025y. Ethnology of North American Indians. Professor Rubel.

Not given in 1970-71.1

[V1028y. Peoples of the Middle East. Professor Rosman.

Not given in 1970-71.]

V3002y. Political Anthropology.

The development and comparative study of political structure and government in non-Western societies. Professor Bond. M W 4:10-5:25

V3003x. Problems in Developing Countries.

Analysis and comparison of political and social problems in developing countries. Professor Denitch. M W 2:10-3:25.

V3011x. Social Organization.

The institutions and organization of social life, particularly in the non-literate societies. Kinship and locality in the structuring of society. Prerequisite: an introductory anthropology course. Professor Rosman. Tu Th 2:10-3:25.

V3027y. Culture and the Individual.

The development of personality in varying cultural contexts; child rearing and socialization; the role of personality theories in analyzing social systems and situations of culture change. Prerequisite: an introductory anthropology course. Professor Rosman. Tu Th 2:10-3:25.

V3029y. The Archaeology of the New World.

A survey of the prehistoric past of native American cultures from the time of the aboriginal settling of the New World by Asian immigrants to that of European contact. Special emphasis upon the rise of the New World civilizations in Mexico and Peru and the processes leading to their development. Prerequisite: a year of introductory anthropology and permission of the instructor. Dr. Stigler. M W 11-12:15.

V3032x. The Archaeology of the Old World.

A survey of the principal areas of cultural development in Europe, Asia, and Africa from the earliest beginning of human culture to the dawn of the first civilization. Prerequisite: a year of introductory anthropology and permission of the instructor. Dr. Stigler. M W 11-12:15.

Anthropology-Linguistics V3034y. Language and Culture.

Language in its social setting. Social and geographical dialects; covert classificatory systems; ethnotaxonomy; men's and women's speech; baby talk; taboos and euphemisms; secret languages and linguistic play. Prerequisite: a year of introductory linguistics or introductory anthropology. Professor Haas. Tu Th 11-12:30.

V3036x. Peasant Societies.

An introduction to pre-industrial agrarian societies. Professor Bond. M W 11-12:15.

[V3037v. Societies in Transition.

Not given in 1970-1971.]

V3038x. Ethnic Relations in Changing Societies.

Analysis and comparison of ethnic relations in settings of cultural pluralism with special reference to developing countries. Prerequisite: an introductory anthropology course. Professor Vincent. Tu Th 9:10-10:25.

V3042y. Primitive Religion.

Ideological systems of simple or preindustrial cultures. Relations between religion and other aspects of culture. Prerequisite: an introductory anthropology course. Tu Th 10:35-11:50.

V3049x. Theory and Results in Archaeology.

Archaeological interpretations of cultural processes, with a survey of past and present theories. Illustrative material from archaeologically significant areas of the world. Prerequisite: permission of the instructor. Dr. Gorenstein. M W 1:10-2:25.

V3050y. Field Archaeology.

Introduction to archaeological techniques and methods of interpreting data. Approximately seven field sessions, supplemented by classroom work. Students must pay for their transportation and food when on the trips. Prerequisite: permission of the instructor. Dr. Gorenstein. S 9-12.

V3100x. Urban Societies.

Evolution of cities. A cross-cultural view of kinds of urban formations. Examinations within an anthropological context of various aspects of urban life. Prerequisite: an introductory anthropology course or permission of the instructor. Professor Rubel. Tu Th 10:35-11:50.

W3200y. Colloquium on Methods of Anthropological Research.

Analysis and application of various methods of anthropological research, including, among others, fieldwork procedures, the cross-cultural method, and approaches to model-building in anthropology. Prerequisite: an introductory anthropology course and permission of the instructor. Professor Rubel. W 10-12.

V3310y. Culture, Causality and Individual Freedom.

Principal varieties of determinist theories of sociocultural continuity and change. Materialist, idealist, and eclectic strategies in recent ethnographic and archaeological research. Status of the concepts of progress, rationality, human nature, and free will in the context of contemporary anthropological knowledge. Implications for individual choice and ethical and political commitment. Professor Harris. W 2:10-4.

FOR MAJORS ONLY

41. History of Anthropological Theory.

PROFESSOR RUBEL. Tu Th 9:10-10:25.

Intellectual developments contributing to the formalization of anthropology as a discipline. The works of Montesquieu, Comte, Maine, Durkheim, and Marx will be considered, along with the theoretical writings of such anthropologists as Tylor, Morgan, Boas, Malinowski and Radcliffe-Brown. Required of all majors in their junior year.

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[0]

[0]

42. Junior Colloquium on Current Anthropological Theory.

Intensive analysis of selected contemporary theoretical approaches and issues in anthropology. Required of all majors in their junior year. Prerequisite: Anthropology 41. Professors Vincent, Denitch and Meeting times of the three sections to be arranged.

V3700x. Colloquium: Anthropological Research Problems in Complex Societies.

Study of the local community and its relationship to regional and national societies. Discussion of plural societies, minority and ethnic groups in a cross cultural setting. Cases will be selected from Africa, Latin America, Asia, Europe, and North America. Professor Wagley. M 4:10-6.

51-52. Anthropology Senior Seminar.

Discussions and conferences on the researching and writing of the senior essay. Th 4:10-6.

ANTHROPOLOGY

Section I PROFESSOR KLASS.

Section II PROFESSOR ROSMAN.

Section III PROFESSOR RUBEL.

Section IV PROFESSOR VINCENT.

Section V PROFESSOR DENITCH.

Section VI PROFESSOR

GRADUATE COURSES

Certain graduate courses listed in the Bulletin of the Graduate School of Arts and Sciences are open to qualified majors with the consent of the department and the instructor. In general, these are the G4000-level courses.

ART HISTORY

PROFESSORS: JULIUS S. HELD, BARBARA NOVAK (Chairman; 301C Barnard Hall)

ASSOCIATE PROFESSOR: DOROTHEA NYBERG

ASSISTANT PROFESSOR: GEORGE STRICEVIC

VISITING LECTURERS: THOMAS MESSER, BRIAN O'DOHERTY

INSTRUCTORS: VICTORIA BARR, ANNE HEUNE HOY

VISITING ARTIST: ADJA YUNKERS

OFFICERS OF COLUMBIA UNIVERSITY GIVING INSTRUCTION IN BARNARD COLLEGE:

ASSISTANT PROFESSORS: ANN FARKAS, ANN SUTHERLAND HARRIS

INSTRUCTORS: ESTHER PASZTORY, EUGENE SANTOMASSO

LECTURER: DORIS SRINIVASAN

OFFICERS OF COLUMBIA UNIVERSITY OFFERING COURSES OPEN TO BARNARD STUDENTS:

PROFESSORS: GEORGE R. COLLINS, HOWARD McP. DAVIS, HOWARD HIBBARD

ASSOCIATE PROFESSOR: DAVID ROSAND

ASSISTANT PROFESSORS: HUNTER INGALLS, ELWOOD PARRY III

INSTRUCTORS: ROSEMARY BLETTER, DAWSON CHANG

Art is a unique form of human experience. A study of its history will often provide a surprisingly vivid insight into the intellectual currents, the religious doctrines and practices, and the social institutions of the past. The student will see to what extent the unfolding of art is determined by conditions existing outside it, and by the impetus given it by the great creative personalities. She will in consequence gain a deepened understanding of the art of our own time and an ability, often fully appreciated only after she has left college, to enjoy intelligently the great accumulation of art in museums all over the world.

Courses in the department of Art History are designed to take advantage of the resources of New York, one of the world's great centers of art. A limited number of studio courses are also offered at Barnard; in addition, students are encouraged to take any course for which they qualify in the Department of Painting and Sculpture, School of the Arts of Columbia University. See page 68 for regulations governing these courses. Studio courses do not count toward the major.

Students who want to major in Art History must take at least eight courses in the department. They should select a full-time member of the department as their adviser, preferably during their sophomore year and not later than the beginning of their junior year. They should plan their academic program in consultation with this adviser. The department strongly suggests that students take AH 1-2 and thereafter a broad range of courses so as to be able to appreciate the variety of artistic expression in different

countries and periods. Students may register their major as art history with emphasis on architecture. Any inquiries should be addressed to Professor Nyberg.

Seniors in Art History are required to write a senior thesis, the topic to be chosen in consultation with the appropriate officer of instruction no later than the beginning of the senior year. The thesis must be turned in before the spring recess. Seniors must also take two seminars, either at Barnard or at Columbia University.

Students planning to do graduate work should obtain a reading knowledge of at least two of the foreign languages in which the major contributions to the history of art have been made. (Most graduate schools require a reading knowledge of French and German.)

1-2. Introduction to the History of Art.

[5]

A study of the art historian's method and a historical survey of Western architecture, sculpture, and painting. Emphasis will be given to the interrelation of form and content and the correlation of the visual arts with their respective cultural environments. Autumn Term: Greek and classical art, medieval art. Spring Term: Renaissance to modern art. Mrs. Hoy. Lecture M. W 2:10, third hour to be arranged.

31. Pre-Columbian Art.

[9]

A survey of the pre-Hispanic art of Mesoamerica, Central America, and the Andean region, from the earliest times to the Spanish Conquest. Mrs. Pasztory. Tu Th 2:40-3:55.

V3056y. Primitive Art.

A survey of the art of the primitive peoples of Africa, Oceania, and America, with emphasis on aesthetic qualities, function, and historical relationships. Mrs. Pasztory. Th 6:10-9.

43. Ancient Near Eastern Art.

[4]

Ancient art as cultural history: a survey of the archaeological remains of the early civilizations of western Asia (Mesopotamia, Iran, Anatolia, Syria) from the beginnings of cities to the fall of the Persian Empire. Professor Farkas. M W F 1:10

44. Introduction to Ancient Art (Part II).

[4]

The architecture, sculpture, and painting of the Minoans and Greeks, and of the Romans down to the time of Constantine. Mr. Santomasso. M W F 1:10.

51, 52. Medieval Art.

[2]

Autumn Term: Christian art from its beginnings in the late antique world in Mediterranean countries through the early Christian and Byzantine periods, with emphasis on mosaics and illuminated manuscripts, followed by the Celtic and Carolingian styles of western Europe. Spring Term: Romanesque sculpture and architecture of Italy and France and Gothic architecture, sculpture, and painting, ending with the introduction of the Italian Renaissance into France. Open to all

except freshmen. 51 is prerequisite to 52. PROFESSOR STRICEVIC. M W F 10. Visits to the Metropolitan Museum of Art, the Pierpont Morgan Library, and the Cloisters.

53. Christian Iconography.

[5]

A study of the sources of Christian iconography in Scriptures and other texts, and of the role played by Jewish and Hellenistic traditions. The crystallization of iconographical patterns under the influence of liturgy, and the liturgical drama and their codification in manuals of painting. Professor Stricevic. M W 2:10-3:25.

54. Byzantine Art.

[5]

A survey of Byzantine art from its sources to the fall of Constantinople. The role of the Capital as a new art center will be studied as well as the spreading of Byzantine art to Italy and the Slavonic countries, and its interaction with the art of Western Europe. Professor Stricevic. M W 2:10-3:25.

61. European Architecture from the Renaissance through the Rococo Style. [13]

The developments of Renaissance, Baroque, and Rococo architecture in Italy, France, Germany and England from the fifteenth to mideighteenth century. Among the architects to be studied will be Brunelleschi, Bramante, Michelangelo, Delorme, Cortona, Borromini, François Mansart, Hardouin-Mansart, Inigo Jones, Wren, Neumann, and Boffrand. Professor Nyberg. Tu Th 3:35-4:50.

[63. Italian Renaissance Sculpture. Professor Beck.

Not given in 1970-71.]

[64. European Sculpture, Baroque to Modern. PROFESSOR NYBERG.

Not given in 1970-71.]

C3633x. Italian Renaissance Painting (Part I).

A study of painting in Italy from the revival of painting in the late thirteenth century to the early sixteenth century. Emphasis is on the Early Renaissance and on a close analysis of the works of Giotto, Masaccio, and Piero della Francesca. The High Renaissance is discussed less fully with stress on Leonardo da Vinci and Michelangelo and their role in the continuity of tradition. Professor Davis. Tu Th 11-12:15.

C3222y. (Comparative Literature C3222y). Seminar on Renaissance Art and Literature.

An exploration of themes of recurring interest in the literature and art of Italy, England, and France in the period ca. 1350-1600, with emphasis on the classical tradition. Prerequisites: Junior standing and permission of both instructors. Professors Hanning and Rosand. Th 10-11:50.

C3688y. Northern European Painting.

Renaissance humanism and realism in the tradition of satiric imagery and the emergence of the Baroque, particularly in Flanders and Holland, with emphasis on Jan van Eyck, Rogier van der Weyden, Bosch, Bruegel, and Rembrandt. Professor Davis. Tu Th 11-12:15.

C3107y. Italian Painting of the Sixteenth Century.

The styles and significance of painting in Italy, with discussion of the concepts of High Renaissance and Mannerism. Emphasis is on major figures such as Leonardo, Raphael, Michelangelo, Giorgione, Titian, Veronese, Tintoretto, Correggio, and Parmigianino. Professor Rosand. Tu Th 2:10-3:25.

- [66. Italian Sixteenth-Century Painting (Part II). Not given in 1970-71.] PROFESSOR HARRIS.
- [67. Renaissance Painting in Northern Europe. Not given in 1970-71.] PROFESSOR HELD.

C3973y. Seminar on Michelangelo.

An intensive study of the major works in architecture, sculpture, and painting. Prerequisites: Junior standing and permission of the instructor. Professor Hibbard. W 2:10-4.

C3974x. Seminar on Prints and Drawings.

Style and function in drawing from the fifteenth century to the present and the development of print-making as an expressive medium. Several meetings will be held at the Metropolitan Museum print study room. Prerequisites: Junior standing and permission of the instructor. Professor Rosand. W 2:10-4.

70. European and American Architecture from the Eighteenth Century to the Present.

The development of Neoclassical architecture in eighteenth century Europe and its influence on American architecture; the interaction of historic styles and new structural techniques in the nineteenth century; Louis Sullivan and the development of the skyscraper; finally, American and European architecture of the twentieth century. Professor Nyberg. Tu Th 3:35-4:50.

75, 76. European Painting since the Renaissance.

Autumn Term: Painting in Italy, France, Flanders, and Spain from 1600 to the middle of the eighteenth century, with emphasis on Caravaggio, the Carracci, Poussin, Rubens, Velazquez, Watteau, Hogarth, and Tiepolo. Professor Harris. Tu Th 2:10-3:25.

Spring Term: After a discussion of Dutch seventeenth century painting, with emphasis on Rembrandt, the course deals with the revolutionary artists of the late eighteenth century (Goya, David) and traces the nineteenth century development from Romanticism to Post-Impressionism and Art Nouveau. Professor Held. Tu Th 2:10-3:25.

77. American Art from Colonial Times to the Armory Show. [10]

The development of the arts in America from Colonial times to the Armory Show of 1913 with special emphasis on Realism and Romanticism in the nineteenth century. Open to all except freshmen. Professor Novak. M W 3:10-4:25.

[9]

C3976y. The Image of the Indian and the Black Man in American Art.

Discussion of general themes and analysis of specific representation on Indians and Black men in American art. Shifts in artistic attitude to be treated within the larger context of style based on the context of European tradition. Prerequisites: Junior standing and permission of the instructor. Professor Parry. Th 2:10-4.

C3681y. American Art in the Twentieth Century.

Painting and sculpture in the United States from 1900 to the present. Native traditions and the interrelationship between these and influences from abroad, as evidenced by the work of both individuals and groups. Professor Ingalls. M W 3:10-4:25.

81, 82. The Literature of Art.

[2]

Study of the literary sources used in art historical research; artists' letters, journals and treatises (by Leonardo, Rubens, Delacroix, Van Gogh), contemporary biographies (Vasari and Van Mander), the ideas and writings of leading critics and scholars (Fromentin, Baudelaire, Ruskin, the Brothers Goncourt, Huizinga, Burckhardt, Wolfflin, Worringer, Berenson, Fry, Panofsky, Gombrich, Read, Malraux). The Autumn Term will be devoted largely to writings of artists and their contemporary critics. The Spring Term will be devoted to theories of modern criticism and scholarship. Intended for junior majors, but also open to senior majors. Professor Novak. M 10-11:50.

[83. Masterpieces of Art in the New York Museums.

PROFESSOR HARRIS.

Not given in 1970-71.]

C3812y. Photography and the Arts.

A survey of the interrelation of artistic and photographic vision from the early nineteenth into the twentieth century, in landscape, still life and portrait images by major artists and photographers in Europe and America. Professor Parry. M W 1:10-2:25.

V3662y. Cities and Planning.

Characteristic forms of cities since ancient times. Analysis of the purpose and meaning of forms of preplanning that have been suggested, especially since the Renaissance. Professor Collins. M W 12-1:15.

Architecture C3150x. The Architect in Society.

A review of the practice of architecture from ancient times to the present, the impact of communal living on the design of structure for organized society. Present practices and future prospects. Mr. RASKIN. M W 1:10.

84. (English 84). The Vernacular in the American Arts of Design [13]

The conflict between the "cultivated" and "vernacular" styles. The development of an American aesthetic in technology, architecture, fine arts, literature, and other arts. Professor Kouwenhoven. Tu 3:35-5:25.

86. Seminar in Art Criticism.

[2]

An examination of modes of contemporary criticism with reference to current exhibitions and writings. Students will be required to engage in criticism of museum and gallery exhibitions. Attention will be given particularly to problems of language and opinion. The work of critics from Baudelaire on will be examined in its historical context and for its possible relevance to the present. Mr. O'Doherty. F 10-11:50.

88. Introduction to Painting and Sculpture of the Twentieth Century. [6]

A summary of the principal stylistic developments of the period in question through presentation and discussion of selected artists and their work. Emphasis will be placed on the movements of Fauvism and Expressionism, Cubism, Neoplasticism, Dada, and Surrealism, as well as upon some post-war developments. Mr. Messer. Tu Th 9:10-10:25.

C3975x. Seminar on the Bauhaus.

An exploration of the Bauhaus' total approach to art, which included painting, sculpture, architecture, crafts, photography, graphic and industrial design, and theater arts. Among the major figures to be studied are Paul Klee, Wassily Kandinsky, Lyonel Feininger, Walter Gropius, and Ludwig Mies van der Rohe. Prerequisites: Junior standing and permission of the instructor. Mrs. Bletter. W 4:10-6.

W3201x. The Arts of China.

A survey of Chinese art from the Neolithic to the last dynastic period of Ch'ing, with emphasis on bronzes, Buddhist art, and great landscape painting of the Sung and later periods. Attention is also given to the arts of Central Asia and India as they affect the arts of China. Mr. Chang. Ţu Th 4:10-5:25.

W3203y. The Arts of Japan.

A survey of the development of Buddhist arts and architecture in Japan as they were introduced from China, including the arts of later periods, with special emphasis on the formation of indigenous art forms such as narrative scroll-painting, decorative screens, and wood-block prints. Mr. Chang. Tu Th 4:10-5:25.

94. Art of India.

[13]

A survey of architecture, sculpture, and painting of India and Southeast Asia from pre-historic times to the nineteenth century, with special emphasis on the great religions of India: Buddhism, Jainism, and Hinduism. Mrs. Srinivasan. Tu Th 2:10-3:25.

97, 98. Seminar for Seniors.

97. Art and Propaganda.

[1]

The use made of art for purposes of propaganda and the effect this has had on the art itself. Professor Held. W 9-10:50.

98. Social and Political Functions of Architecture.

[1]

Topics include religious architecture, funeral monuments, the architecture of kingship and of the French and American Republics. PROFESSOR NYBERG. W 9-10:50.

STUDIO COURSES

A maximum of 4 courses of studio work may be credited. Students taking more than 2 courses of studio work are required to validate the additional credit with courses in art history. Studio courses 3, 4 and 5, 6 are given at Barnard and no special permission is needed to take those courses. The remainder of studio courses are given at the School of the Arts, and students may register for these only with written permission of the departmental representative (Professor Andre Racz).

Studio 3,4. Painting Workshop. MISS BARR.

[0]

Studio 5,6. Painting and Drawing. Mr. YUNKERS.

[0]

For further details see the Bulletin of the School of the Arts. Credit for the following: 1 course each term.

Drawing R1001x, R1002y; R1003x, R1004y. Drawing Workshop.

Model fee: \$10. per term. Professor Racz, and Messrs. Ciarrochi, Harrison and Lund. Section I M W 1:10-4. Section II Tu Th 1:10-4. Section III M W 7:10-10 p.m. Section IV Tu Th 7:10-10 p.m.

Painting R1011x, R1012y; R1013x, R1014y. Painting Workshop.

Model fee: \$10. per term. Professors Goldin and Heliker, and Messrs. Gahagan and Stefanelli. Section I M W 9-11:50. Section II M W 1:10-4. Section III Tu Th 1:10-4. Section IV M W 7:10-10 p.m. Section V Tu Th 7:10-10 p.m.

Painting R1017x, R1018y. Painting and Design.

Laboratory fee: \$10. per term. Mr. Stewart. Tu Th 9-11:50.

Printmaking R1041x, R1042y. Woodcut and Wood Engraving.

Laboratory fee: \$10. per term. Mr. UCHIMA. Tu Th 7:10-10 p.m.

Printmaking R1043x, R1044y. Etching and Engraving.

Laboratory fee: \$10. per term. Mr. HARRISON. Tu Th 1:10-4.

Sculpture R1023x, R1024y. Sculpture Workshop.

Model fee: \$10. per term. Professor Padovano. Tu Th 7:10-10 p.m.

Sculpture R1025x, R1026y. Carving and Design.

Laboratory fee: \$10. per term. Professor Swarz and Mr. Campbell. Section I M W 9-11:50. Section II M W 7:10-10 p.m.

Sculpture R1027x, R1028y. Welding and Design.

Laboratory fee: \$15. per term. Professors Padovano and Swarz. Section I Tu Th 9-11:50. Section II M W 7:10-10 p.m.

GRADUATE COURSES

Certain graduate courses given at Columbia University are open to qualified majors with the consent of the chairman of the department and the major adviser. A description of these courses will be found in the Bulletin of the Graduate School of Arts and Sciences. The following courses are specifically recommended as suitable for Barnard seniors:

- G4075y. Art of Negro Africa. PROFESSOR FRASER. W 7:10-9.
- G4091x. Art of the American Southwest. Mr. Koenig. F 10-11:50.
- G4180x. Egyptian Sculpture and Painting. PROFESSOR PORADA. Tu 6:10-8.
- G4215x. Greek Myths and Monuments.
 MISS HENLE. M 6:10-8.
- G4261x. Roman Architecture.
 PROFESSOR FRAZER. F 2:10-4.
- G4320x. Early Christian Painting.
 PROFESSOR SCHAPIRO. W 10-11:50.
- G4324x. Carolingian Art.
 PROFESSOR DYNES. Th 4:10-6.
- G4430y. Italian Renaissance Sculpture. PROFESSOR BECK. Tu 2:10-4.
- G4546y. Seventeenth Century French Architecture. PROFESSOR NYBERG. M 10-11:50.
- G4555y. German Painting of the Fifteenth and Sixteenth Centuries. PROFESSOR HELD. W 4:10-6.
- G4585y. English Architecture of the Seventeenth and Eighteenth Centuries. Professor Wittkower. W 10-11:50.
- G4642x. Modern Art and Tradition. PROFESSOR REFF. F 10-11:50.

BIOLOGICAL SCIENCES

PROFESSORS: WILLIAM A. CORPE, DONALD D. RITCHIE (Chairman; 1205 Altschul Hall)

ASSOCIATE PROFESSORS: PATRICIA L. DUDLEY, FREDERICK E. WARBURTON2

Assistant Professors: David W. Ehrenfeld, Patricia N. Farnsworth

OFFICERS OF COLUMBIA UNIVERSITY GIVING INSTRUCTION IN BARNARD COLLEGE:

SHERMAN BEYCHOK, JAMES E. DARNELL, CYRUS LEVINTHAL, FRANK G. LIER, JOSEPH MAZZEO

ASSOCIATE PROFESSORS: WALTER J. BOCK, 2 ALBERTO L. MANCINELLI2

ASSISTANT PROFESSORS: DOMINICK V. BASILE, THOMAS G. EBREY, MICHAEL J. SCHNEIDER, RONALD R. SEDEROFF, DAVID ZIPSER

The major program is designed to serve a variety of needs. Some students interested in general education major in biology because they desire specific knowledge of living organisms. Other students specialize in biology in anticipation of graduate work in this field, or in preparation for medical or dental school. Still others plan a career in government, educational or private research organizations, or they may wish to teach at the elementary or intermediate school level.

The sequence of courses to be followed depends on the ultimate aims of the student and is planned in consultation with members of the department. Planning of the course sequence in biology and related fields is necessary to provide a balanced program and to assure that prerequisites for advanced courses are completed in time.

Course 1-2 should be elected by those students who had a standard biology course in high school, as well as by those who have had no previous training in biology. Some courses taken outside the department may be counted toward a biology major: Anthropology V3201x or y, Chemistry C3072y, and Psychology 17.

Biology V1097x and Biology W1095x-W1096y are recommended courses, but may not be counted toward the biology major requirement. Courses at the 4000 level require special permission.

Three or four chemistry courses, chosen in consultation with an adviser, fulfill the minimum requirements in chemistry for graduate work in biology and for entrance into medical school, and this amount is generally regarded as the minimum for biology majors as well. A year of general physics, 3-4, should be taken by majors who plan on graduate work or a career in medicine. Graduate work in biology requires a knowledge of German and French (or some other modern language). College mathematics, including calculus, is strongly recommended.

The Undergraduate Record Examination is given as the major examination. Students are encouraged to do summer work in biological laboratories or

¹ Absent on leave, Autumn Term. ² Absent on leave, Spring Term.

field stations. Assistance toward such work may be awarded to qualified students through the Edna Henry Bennett Memorial Scholarship Fund or the Herbert Maule Richards Fund.

Research projects may be selected by students desiring to do individual work. They are usually related to current faculty research and may lead to professional publication. Greenhouse space and laboratory equipment are made available for such projects.

1-2. General Biology.

[1]

The development of biological knowledge, with emphasis on unsolved problems and the nature of scientific evidence; energy relations of living things, cellular activities, inheritance, development and differentiation, evolution, ecology, and social implications. Professors Ehrenfeld, Farnsworth, and Ritchie. Lec. M W F 9. Lab. (3 hours) M 1:10-4; Tu 9-11:50; 2:10-5; W 1:10-4; Th 9-11:50; 2:10-5; F 1:10-4.

C1007x. General Biology.

1. Molecular biology, with emphasis on bacteria and viruses. The synthesis of large and small molecules, enzyme mechanisms and various aspects of genetics and cellular control of synthesis. 2. Evolution of more complicated processes in simple multicellular organisms; structure and function of organelles in cells of higher organisms; general problems of development. 3. Higher organism physiology, with emphasis on man. 4. Evolution and the principles of classification of plants and animals; the origin of life on earth. Prerequisite: any full-year course in calculus and one of the following: Physics C1006 or Chemistry C1404 or C1407. Messrs. Darnell and Levinthal. Lec. MWF 11. Rec. Tu 1:10-3.

C1008y. Project Laboratory in General Biology.

A project laboratory course in molecular biology, with emphasis on DNA, RNA, and protein syntheses and their control. Part I: students repeat an experiment which has been reported in the recent literature. Part II: students carry out an experiment which they have designed in consultation with the instructor. Prerequisite: C1007 and permission of the instructor. Limited to approximately 20 students. Instructor to be announced. Lab: 8 hours to be arranged.

4. Natural History of the New York Area.

[0]

Field observations of plants, fungi, birds, lower invertebrates, and insects. Methods of identification, collection, preservation. Visits to nearby semi-wild regions and to areas severely altered by human activity. Written permission of the instructor required. Professors Dudley, Ehrenfeld, Ritchie, and Warburton. Field trips, laboratory, and discussions. Hours to be arranged.

5. Introduction to Genetics, B.

[7]

Mendelian and quantitative genetics of plants, animals, and man: segregation, recombination, measurement of linkage, and the genetics of continuous variation. Cytogenetics. Developmental genetics. Population genetics and evolution. Human genetics will be emphasized where

it exemplifies general principles. Prerequisite: a course in introductory biology; calculus or statistics, or permission of the instructor. Professor Warburton. Lec. Tu Th 10. 1 hour recitation and demonstration.

[6. Evolution.

Not given in 1970-71.]

7. Invertebrate Zoology.

[8]

The biology of invertebrate animals: Comparative fine and gross structure, development, physiology and autecology. Major emphasis on marine invertebrates. Laboratory-demonstration includes a survey of major groups and an individual project on the ultrastructure, physiology, or ecology of an invertebrate animal. Prerequisites: a year of college-level biology and permission of the instructor. A course in cell biology is recommended. Professor Dudley. Lec. Tu Th 11. Lab/demonstration (4 hours) M 1:10-5 or Th 2:10-6.

8. Physiological Ecology.

[4]

The interactions of invertebrate and vertebrate animals with their physicochemical environment. Comparative physiology of responses to varying environmental stimuli; the concept of the niche; dynamics of population structure and oscillations; competition, cooperation and other interspecies interactions; ecological energetics. Prerequisites: a year of college-level biology and permission of the instructor. A course in general chemistry is recommended. Professor Dudley. Lec. MWF 1:10.

10. Microbiology.

[5]

An introduction to the study of microorganisms, with emphasis upon the bacteria. Their general biology, physiology, pathogenesis and importance in human economy will be emphasized. Prerequisite: a year of biology with laboratory. PROFESSOR CORPE. Lec. M W 2:10. Demonstration W 3:10-4.

[W1095x. History of Biology.

Professor Mazzeo.

Not given in 1970-71.]

12. Cytology.

[7]

The biology of cells: composition, development, and activities of cell walls, membranes, mitochondria, plastids, and chromosomes. Laboratory includes practice in fixation, sectioning, homogenization, smears, photomicrography, and specialized types of microscopy, including electron microscopy. Prerequisite: a year of biology with laboratory. Permission of the instructor required. Professor Ritchie. Lec. Tu Th 10. Lab. (6 hours) individually arranged.

13. Biological Conservation.

[3]

The conservation of natural communities and species. Emphasis will be placed on the influence of human population increase and the growth of technology on the current bio-environmental crises. The interaction between ecological theory and conservation practice will be stressed. Limited to 30 students. Prerequisite: a year of biology and permission of the instructor. Professor Ehrenfeld. Lec. MWF 11 and conf. to be arranged.

15. Cellular Physiology.

[4]

An interpretation of vital phenomena at the cellular level in terms of known laws of physics and chemistry. Topics to be discussed will include the functional organization of cells; the relation of cells to their environment; molecular biology and physiology of membranes; bioenergetics; and the irritability and contractility of cells. Permission of the instructor required. Professor Farnsworth. Lec. M W 1:10 and Conf. F 1:10. Lab. (4 hours) to be arranged.

16. Physiology of Multicellular Organisms.

[4]

An interpretation of vital phenomena on the organ level. Topics to be discussed include the major body systems and their functional relationships. Permission of the instructor required. PROFESSOR FARNSWORTH. Lec. MW 1:10-2. Conf. F 1:10-2. Lab. hours to be arranged.

17. The Biology of Urbanization.

[6]

Changes in plant and animal life in regions undergoing increased urbanization; the natural history of cities; the past, the present, and the possible future; human factors causing biological changes in densely populated areas. Mr. Schmid. Tu Th 9:10-10:25.

18. Biological Management in Cities.

[6]

Study of methods for controlling the non-human organisms living in or near cities; discouragement of disease-carriers and destructive species, encouragement of desirable species in malls, verges, parks, and small vegetated areas; possibilities for education in and public concern for plants and animals. Mr. Schmid. Tu Th 9:10-10:25.

[W3002y. Structure and Function of Animals.

PROFESSOR BOCK.

Not given in 1970-71.]

W3022y. Developmental Biology.

An integrated account of descriptive and experimental facts of vertebrate development and problems of differentiation. Prerequisite: an introductory course in biology and written permission of the instructor. Prerequisite or corequisite: organic chemistry. MISS ABBOTT. Tu Th 11-12:15.

W3040y. Laboratory in Cell and Developmental Biology.

Lectures cover material to be studied in the laboratory such as histology, sequences of developmental phenomena in selected organisms and techniques. The laboratory provides an introduction to basic materials and techniques in cell and developmental biology. Each laboratory section will be limited to 25 students. Sign-up sheets for sections will be posted outside the departmental office. Prerequisite or corequisite: a course in elementary cell biology or developmental biology. With permission of the instructor, background gained in other courses may fulfill this requirement. MISS ABBOTT, MRS. ARNOLD, MR. HOLTZMAN, MR. RUBIN and STAFF. Lec. Tu 12:30-1:20. Lab. Section I Tu 2:10-6, Section II Th 1:10-5, Section III Th 6:10-10 p.m.

W3041x. Cell Biology.

An introduction to cell biology stressing the relations of cell structure to physiology and heredity, and the experimental and observational bases of present views of the cell. Prerequisite: one year of biology or a comparable background and written permission of the instructor. Mr. Holtzman. Tu 11-12:15 and Th 11-12:30.

C3044y. Project Laboratory in Cell Biology.

A project laboratory course featuring instruction in techniques involving growth of individual mammalian cells, selection of mutants, and fusion of cells of differing genotypes, followed by experimentation in the biochemical genetics of mammalian cells. Limited to approximately 25 students. Prerequisite: C1007x, one term each of biochemistry and genetics, or permission of the instructor. Mr. Chasin. Lab.: 8-12 hours to be arranged.

W3222y. Evolution and Diversification of Land Plants.

The evolutionary development of the several divisions of land plants from presumed algal ancestors. Concepts such as alternation of generations, the Telome Theory, the Stelar Theory, and floral evolution are emphasized in lecture. An experimental approach to phylogeny is emphasized in laboratory. Prerequisite: one term of biology and permission of the instructor. Mr. Basile. Lec. Tu Th 10. Lab.: Tu or Th 1:10-5.

V3231x. Microanatomy of Seed Plants.

The microscopic and submicroscopic structure of the seed plants in relation to cell types and major tissue systems. Primary and secondary growth of the root and stem, leaf development, and structure of reproductive elements. Prerequisite: C1001 or the equivalent and written permission of the instructor. Mr. Lier. M W 7:40-8:55 p.m.

[W3241x. Structure and Interaction of Plant Communities. PROFESSOR LIER. Not given in 1970-71.]

C3501x. Biochemistry I.

Chemistry and metabolism of amino acids, carbohydrates, lipids, and of the macromolecular constituents of living systems. Elementary thermodynamics in biochemical equilibria. Enzymes and proteins in respiration. Introduction to some well-established relationships between structure and function of the biological macromolecules. Prerequisite: one year each of biology and organic chemistry. Prerequisite or corequisite: physical chemistry. Mr. Beychok. M W F 10.

61, 62. Problems in Biology.

[0]

Independent work will be planned to suit the needs of the student after consultation with the instructors. STAFF. Hours and credit by arrangement.

71. Senior Seminar.

[0]

Reading of literature and discussion of fundamental problems of zoology. Professor Warburton. Hours by arrangement.

BIOLOGICAL SCIENCES

G4002y. General Physiology.

An introductory course in general and comparative physiology with emphasis on the physiology of transduction, amplification, and motility in biological systems. Topics will include membranes, bioelectric potentials, behavior of nerve cells (Hodgkin-Huxley equations), sensory physiology, photosynthesis, and motility. Prerequisite: physical chemistry or permission of the instructor. Professor Ebrey. M W 3:40-4:55.

G4011x. Plant Physiology.

Cell structures and functions. Water relations of plants. Intermediary metabolism. Nitrogen metabolism. Mineral nutrition. Photosynthesis. Growth and organization in plants. Prerequisite: one year each of biology, chemistry and physics. Professor Mancinelli. Tu Th 5:10.

[G4014y. Plant Photobiology.

PROFESSOR MANCINELLI.

Not given in 1970-71.]

G4015x. Developmental Physiology of Plants.

Control of plant growth by hormones, regulators, and inhibitors. Physiology and biochemistry of plant development considered from conception through reproduction and senescence. Prerequisite: permission of the instructor. Professor Schneider. Lec. Tu Th 10. Conf. as required.

C3032y. Introduction to Genetics, A.

Fundamental mechanisms and principles of genetics. Topics will include the molecular mechanisms of mutation, recombination and differentiation; the genetic code; genetic control of morphogenesis; extrachromosomal inheritance; chromosome structure and function; and chromosome mechanics. Prerequisite: C1001 or C1007. PROFESSOR SEDEROFF. M W 1:10-2:25.

G4061y. Biology of Microorganisms.

Morphology and chemical and physical structure of microbial cells; growth and general physiology; and the influence of environment on nutrition, enzymes, and metabolism of representative microbial species with emphasis on the bacteria. The lecture series counts as one course for Barnard students. Prerequisite: one year of college biology, one course in organic chemistry and permission of the instructor. Professor Corpe. Lec. Tu Th 2:10. Lab. Tu Th 3:10-5 and 1 hour to be arranged.

[G4212y. Animal Behavior.

Not given in 1970-71.]

Professor Ehrenfeld.

Not given in 1970-71.]

[G6062y. Advanced Microbiology. Professor Corpe.

CHEMISTRY

Professors: Edward J. King (Chairman; 802 Altschul), Emma D. Stecher

ASSOCIATE PROFESSOR: BERNICE G. SEGAL¹

ASSISTANT PROFESSOR: JACQUELINE I. KROSCHWITZ, ALEXANDER R. MAZZIOTTI

LECTURER: GRACE W. KING

ASSISTANTS: SHEILA BASSMAN, LEA FISCHBACH, BARBARA GOODSTEIN, OLYMPIA JEBEDJIAN

Chemistry majors seek to understand the structure of proteins, why nickel chloride is green, how xenon reacts with fluorine, the peculiar bonds in boron hydrides and benzene, and other aspects of the nature of substances and their transformations. Chemists have taken a leading part in the development of our modern scientific and technological society. The influence of chemistry on other sciences is indicated by the growth of such advanced disciplines as biochemistry and molecular biology, chemical physics, and geochemistry. Upon graduation, some chemistry majors obtain research positions in chemical industry and medical laboratories. Others become technical writers or editors or science librarians. Many continue with graduate work in chemistry or related sciences or enter medical and other professional schools.

The chemistry offering is in the process of revision with new first-year courses being introduced this year. A student who is interested in chemistry should consult a representative of the department for advice in planning her program. In the first year she should take Courses 1 or 11 and 30 and start or continue the study of calculus. It is then possible for her to fulfill the basic requirements for the major in three years and to take advanced courses in the senior year. Students who have taken an Advanced Placement Course in secondary school may be given advanced placement and credit if they obtain a score of 4 or 5 on the examination and present evidence of satisfactory laboratory experience. A list of major requirements, several possible course sequences, and information about the major examination may be obtained from members of the department. Majors who complete a specific program receive an accrediting certificate from the American Chemical Society.

The new laboratories of the department are modern and well equipped both for course work and for independent projects. Experience with modern instruments begins in the first-year course. Students may undertake independent projects under the guidance of members of the department. This has been done recently during both the academic year and the summer, and some of the work has been published in chemical journals. Short projects may also be undertaken in several of the courses of the first three years.

Absent on leave, Autumn Term.

1. General Chemistry IA.

[6]

The particulate nature of matter in various states. Chemical transformations of matter, especially of ionic substances. Chemical kinetics, energetics, and equilibrium. Laboratory experience with both qualitative and quantitative techniques. Professor King, Dr. King, and assistants. Lec. Tu Th 9:10-10:25. Recitation and laboratory, one afternoon: M, W, or Th 1:10-4:30 or Tu 2:10-5:30.

2. General Chemistry II.

[1]

Atomic and molecular structure. The chemistry of carbon compounds. Giant molecules. Biochemical reactions. A terminal course for majors in fields other than science. Prerequisite: Course 1 or 11 or permission of the instructor. Professor Kroschwitz, Dr. King, and assistants. Lec. M W F 9. Recitation and laboratory, one afternoon: M or Tu 1:10-4:30.

11. General Chemistry IB.

[6]

Covers the same material as Course 1 but with greater emphasis on the theoretical and mathematical aspects. Prerequisite: superior preparation in either chemistry or physics and either some prior exposure to calculus or coregistration in a calculus course. Professor Mazziotti, Dr. King, and assistants. Lec. Tu Th 9:10-10:25. Recitation and laboratory, one afternoon: W or Th, 1:10-4:30.

30. Organic Chemistry I.

[6]

Atomic and molecular structure. An introduction to aliphatic and aromatic chemistry with emphasis on modern theories. Laboratory work stresses acquisition of basic techniques. Prerequisite: Course 1 or 11. Professor Kroschwitz and assistant. Lec. Tu Th 9:10-10:25. Laboratory, one afternoon: Tu, W, or Th 1:10-5.

41. Basic Principles of Organic Chemistry.

[3]

Typical reactions of aliphatic compounds with an introduction to aromatic chemistry and emphasis on modern theories. Laboratory work in organic preparations. Prerequisite: Course 8. Professor Stecher and assistant. Lec. M W F 11-12:10. Laboratory one afternoon: Tu 2:10-6, W, Th 1:10-5.

42. Further Aspects of Organic Chemistry.

[3]

Lectures emphasize aromatic chemistry and more complex molecules including carbohydrates and proteins. Required for biology majors and premedical students. Prerequisite: Course 41. Professor Stecher. Lec. M W F 11-12:10.

44. Modern Practices of Organic Chemistry.

[18]

An introduction to qualitative and quantitative organic analysis and to advanced techniques, including instrumental and chromatographic methods, with a library problem and a short project. Majors must take this course, but it is not required by all medical schools. Prerequisite: Course 41. Professor Stecher and assistant. Lec. Th 1:10. Laboratories two afternoons: Tu Th and if warranted, W 1:10-5.

51. Physical Chemistry I.

[2]

The laws of thermodynamics and their application to simple chemical systems; kinetic molecular theory; basic concepts of quantum mechanics and the interpretation of heat capacity data. Chemistry majors should take Course 57 in parallel. Prerequisite: Course 8; Calculus III preceding or parallel; Physics 3-4 or equivalent. Professor Mazziotti. Lec. M W F 10. Recitation: one hour to be arranged.

52. Physical Chemistry II.

[8]

Rates of chemical reactions; thermodynamics of heterogeneous systems; nonelectrolyte and electrolyte solutions; electrochemistry; macromolecules. Applications to analytical processes and biochemistry. Prerequisite: Course 51. Professor Mazziotti. Lec. Tu Th 10:35-11:50.

54. Physical Chemistry III. Atomic and Molecular Structure.

[2]

Quantum mechanical theory of atomic and molecular structure and chemical bonding; molecular spectroscopy; crystals and symmetry with an introduction to the application of group theory; statistical mechanics. Prerequisite: Course 51. Professor Segal. Lec. M W F 10. Recitation: one hour to be arranged.

57. Physical Chemistry Laboratory.

[0]

Experiments illustrating the physicochemical approach to the study of liquids and gases, thermochemistry, chemical equilibria, and radiochemistry. Construction and characteristics of electronic circuits of instruments. An introduction to computer programming. Prerequisite: Course 8; Calculus I and II; Physics 3-4. Parallel: Course 51. PROFESSOR KROSCHWITZ. Lab. M W 1:10-4. Lecture: one hour to be arranged.

58. Advanced Analytical Laboratory.

[0]

The quantitative investigation of chemical systems; instrumental methods of analysis. Prerequisite: Courses 51 and 57. Preceding or parallel: Course 52. Professor King. Lab. M W 1:10. Lecture: one hour to be arranged.

59. Introduction to the Physical Chemistry of Biochemical Systems. [3]

Selected aspects of thermodynamics, kinetics, and electrochemistry with emphasis on applications to biochemical systems. Intended for premedical and biological science students. May not be counted toward a chemistry major. Prerequisites: Course 42, Calculus I and II, Physics 3-4, or the equivalents. Recommended parallel: C3073x. Professor King. Lec. M W F 11.

C3072y. Bio-organic Chemistry.

Selected aspects of the chemistry of amino acids and peptides, nucleotides and nucleic acids, plant and animal pigments, and other molecules having biological function. Prerequisite: Course 42. Professor Dawson. Tu 9-10:50 and Th 10.

87, 88. Problems in Chemistry.

[0]

Advanced individual laboratory projects for students who have completed the major requirements. Professors King, Kroschwitz, Segal, and Stecher. Eight hours by arrangement.

GRADUATE COURSES

Certain graduate courses given at Columbia University are open with the consent of the department and the major adviser to qualified majors.

BREAKAGE CHARGES

No charge is made for use of apparatus and materials in the chemistry laboratories. Payment will be expected for breakage in excess of \$10 per course.

DANCE

DANCE FACULTY

BALLET, JAZZ, and MODERN: GAY DELANGHE; SANDRA GENTER, Workshop Director; LINDA LERNER; JEANETTE ROOSEVELT, Program Coordinator; JANET SOARES.

FOLK DANCE: JUDAH ENGELSBERG; MARTIN KOENIG; ALFRED LADZEKPO; GUZEY ONOR.

Students interested in dance will find the courses given below pertinent and should consult the departmental listings for course descriptions.

ENGLISH

33-34. Play Production.

PROFESSOR JANES and MR. PACE.

38. Critical Writing in Dance.

MR. SORELL.

MUSIC

1-2. An Introduction to Music. Professor Doris, Miss Carpenter and Mr. Cooper.

V1109x, V1110y. History of Dance.

MRS. ROOSEVELT and MR. SORELL.

PHILOSOPHY

41. Aesthetics.

Professor Mothersill.

PHYSICAL EDUCATION

Dance Technique. Dance Faculty.

Through its physical education program, Barnard College offers studio classes in modern dance, ballet, and jazz, as well as in general folk dance, Israeli Folk Dance, Balkan Folk Dance, and African (Ghanaian) Folk Dance.

Dance 3-4. Dance Composition.

MRS. SOARES.

In addition, the Barnard Dance Workshop affords skilled dancers the opportunity to perform in workshop presentations, in concerts and in programs integrated with drama productions and those of other departments in the College. It sponsors symposiums, master classes conducted by guest artists and other special events. Interested students should confer with Miss Genter.

Students wishing to emphasize dance in their programs at Barnard may integrate dance courses for credit with majors in certain other disciplines. They should consult with Mrs. Roosevelt to plan such a program.

DRAMA

DIRECTOR OF THE MINOR LATHAM PLAYHOUSE: KENNETH JANES (231 Milbank Hall), Associate Professor of English

ASSISTANTS TO THE DIRECTOR: JANET SOARES, DONALD PACE

TECHNICAL DIRECTOR: DENNIS PARICHY

The Minor Latham Playhouse is the center of activities for Barnard students interested in the theater. Majoring in various departments, the students bring to the Playhouse their special abilities and the experience of such courses as those listed below. For further information, consult Professor Janes. Students participate in the staged productions, the experimental and classic drama, dance and opera studio projects of The Barnard College Theatre Company. The Gilbert and Sullivan Society and the Spanish, French, German, Russian, and Italian clubs work in close cooperation with the theater program. The Barnard Bulletin's drama column and WKCR (the Columbia radio station) offer other opportunities to develop abilities related to the theater arts. Barnard's location in New York enables students to attend productions on and off Broadway.

Among the courses concerned with the theater are these, described in detail in the departmental announcements:

ENGLISH

- 13, 14. Dramatic Writing. PROFESSOR TEICHMANN.
- 21. The Uses of Speech. MISS CAUGHRAN.
- 23, 24. Oral Interpretation of Literature. MISS CAUGHRAN.
- 27y. Public Speaking. MISS CAUGHRAN.
- [28. Persuasive Speaking. PROFESSOR NORMAN.

Not given in 1970-71.]

- 29. Introduction to the Theatre. Mr. PACE.
- 33, 34. Play Production. Professor Janes and Mr. Pace.
- 35, 36. The Actor's and Director's Interpretation of Dramatic Literature. PROFESSOR JANES.
- 38. Critical Writing on Dance. Mr. SORELL.
- 63, 64. Shakespeare. Professor Patterson.
- 69y. Renaissance Drama. PROFESSOR PATTERSON.
- [86. Drama from Ibsen to the Present. Not given in 1970-71.]
 PROFESSOR ULANOV.

FRENCH

16. Advanced Oral French. PROFESSOR RIFFATERRE.

[34. The Classical Theater. Professor Balley.

Not given in 1970-71.]

GERMAN

[15. Goethe and Schiller. PROFESSOR SAKRAWA.

Not given in 1970-71.]

25. German Drama in the Nineteenth Century. PROFESSOR PETERS.

[26. The Modern German Theater. Professor Bradley.

Not given in 1970-71.]

GREEK AND LATIN

Classical Literature C3123y. Greek Drama and Its Influences.

Greek V3305x. Tragedy. Professor Bacon.

[Greek V3307x. Greek Comedy. Professor Tarán.

Not given in 1970-71.]

ITALIAN

V3642y. A Study of Contemporary Arts: The Italian Film. PROFESSOR LORCH and MISS YELLEN.

MUSIC

V1005x. The Opera. PROFESSOR BEESON.

V1109x, V1110y. History of Dance. Mrs. Roosevelt and Mr. Sorell.

RUSSIAN

[V1229x. Russian Drama and Theater. PROFESSOR BELKNAP.

Not given in 1970-71.]

SPANISH

22. The Spanish Drama. PROFESSOR UCELAY.

ECONOMICS

MARION HAMILTON GILLIM, RAYMOND J. SAULNIER

(Chairman: 410 Lehman Hall)

ASSOCIATE PROFESSOR: JEAN GOOCH2

ASSISTANT PROFESSOR: DEBORAH D. MILENKOVITCH1

INSTRUCTOR: CYNTHIA BROWN ASSISTANT: ABBIE GAIL TEITZ

OFFICERS OF COLUMBIA UNIVERSITY GIVING INSTRUCTION TO BARNARD STUDENTS:

PROFESSORS: DONALD J. DEWEY. AARON W. WARNER

ASSISTANT PROFESSORS: ROGER C. LAWRENCE, PETER PASSELL

INSTRUCTOR: DAVID A. GOLD LECTURER: MANUEL AGOSIN

PRECEPTORS: JOEL KOBLENTZ, JEAN-CLAUDE KOEUNE, ANWAR

SHAIKH

As a major in economics, a student may arrange a program, with the help of her departmental adviser, to suit her individual needs and interests. For those planning graduate study in economics, special attention to economic analysis and statistics is recommended. Suitable programs can be arranged for students desiring to enter other professional schools or planning to go directly into careers in business, research, government or teaching. An appropriate sequence of courses can be planned, also, for the student whose interest is primarily in economics as a basis for informed citizenship.

A student majoring in economics will be required to take Courses 1 and 2; 27 or 28. Courses 7, 8 and both 17 and 18 are strongly recommended.

Other social sciences: In view of the essential unity of the social sciences, a major is required to take, in addition to a minimum of 8 courses in economics, one course in each of two of the following departments, selected in conference with her adviser: anthropology, geography, government, history, philosophy, psychology, religion, sociology.

Each senior major is required to prepare a research paper, which may be done in connection with one or two semesters of the senior seminar, 51-52, or in 61-62 over a full year. No major examination is required.

1. Introductory Economics.

A study of basic economic concepts with emphasis on the analysis of the aggregate economy. Subjects covered include national income and its determination, business and labor organizations, business cycles, government finance and monetary economics. Professor Gillim, Miss

¹ Absent on leave, Spring Term. ² Absent on leave, 1970-71.

Brown and an additional instructor, to be announced. Section I M W F 10. [2] Section II Tu Th 9:10-10:25. [6] Section III Tu Th 10:35-11:50. [7]

2. Introductory Economics.

Subjects covered include the determination of price and income distribution through supply and demand; monopoly and antitrust policy; international economics; problems of developing nations; and alternative economic systems. Professors Gillim, Miss Brown, and an additional instructor, to be announced. Section I M W F 10. [2] Section II Tu Th 9:10-10:25. [6] Section III Tu Th 10:35-11:50. [7]

3x. Introduction to Economic Analysis.

Fundamental concepts of national income and price theory. Intended primarily for nonmajors. May be used in place of Economics 1, 2 to satisfy the prerequisite for more advanced courses at Barnard. Students intending to major in economics are urged to take Economics 1, 2. Limited enrollment. Professor Milenkovitch. Tu Th 4:10-5:25.

- [3y. Introduction to Economic Analysis.

 Economics 3x repeated in the Spring Term.

 Not given in 1970-71.]
- [7. United States Economic History. PROFESSOR GOOCH.

Not given in 1970-71.]

[8. United States Economic History. Professor Gooch.

Not given in 1970-71.]

16. Government Finance and Fiscal Policy.

[9]

Principles of government expenditure and taxation, and the American systems of spending and taxing. Government debt; government finance in relation to the distribution of national income and wealth and to economic growth and stability; and intergovernment fiscal relations in the United States and in common markets. Prerequisite: Courses, 1, 2 or permission of the instructor. Professor Gillim. Tu 2:10-4.

17, 18. Introductory Statistics.

[1]

Autumn Term: The gathering, processing, presentation and analysis of statistical data; linear correlation; and an introduction to statistical inference. Spring Term: Index numbers; time series; multiple correlation; and other techniques used in the social sciences. Prerequisite: Course 17. Professor Gillim. Lec. M W 9. Lab. (2 hours) M 2:10-4 or Tu 2:10-4 or 4:10-6.

[23. International Economics. Professor Gillim.

Not given in 1970-71.]

[24. The Latin American Economy. PROFESSOR GILLIM.

Not given in 1970-71.]

25, 26. Contemporary Economic Issues.

[5]

A survey of the leading economic issues in present-day American life, including international as well as domestic questions. Lectures and discussion. Open to all except freshmen. Either term may be taken separately. Professor Saulnier. M W 2:10-3:25.

27. Intermediate Macroeconomics.

[7]

Keynesian and neo-Keynesian analyses of the aggregate economy. Prerequisite: Courses 1, 2. MISS BROWN. Tu Th 10:35-11:50.

28. Intermediate Microeconomics.

[7]

Theory of consumer demand, the pricing of goods and services in perfect and imperfect competition, the pricing of the factors of production, and a brief history of these ideas. Prerequisite: Courses 1, 2. MISS BROWN. Tu Th 10:35-11:50.

[29. The Economics of Underdeveloped Areas. Not given in 1970-71.]
PROFESSOR MILENKOVITCH.

[30. Comparative Economic Systems. Not given in 1970-71.]
PROFESSOR MILENKOVITCH.

[33. Economic Planning. Professor Milenkovitch.

Not given in 1970-71.]

36x. Colloquium on Political Economy.

[0]

Selected topics in political economy: social values underlying economic theories; economic institutions and political power; cooperative property and participatory democracy. Readings from Smith, Marx, Veblen, Weber, Galbraith, Polanyi, Sweezy, Lange, and others. Specific emphasis to be determined by the interests of participants. Permission of the instructor required. Professor Milenkovitch. M 2:10-4.

51, 52. Economics Seminar.

[0]

Reading, reports, and discussion centering around the preparation of an essay required of senior majors. Professor Saulnier. W 3:30-5:30.

61, 62. Studies in Economics.

[O]

Additional credits may be obtained in this course for independent work done in connection with some other course in economics. Special reports, a term paper, or the completion of supervised field work is required. The essay required of senior majors may be written in 61-62 rather than in 51, 52. The course may be repeated. Members of the Department.

W1211x. Introduction to Mathematics for Economists.

The development of fundamental mathematical concepts and techniques applicable to economics and business. The rudiments of calculus and related topics, with some of their elementary applications to micro- and macroeconomic theory. Prerequisite: Courses 1 and 2. Mr. Shaikh. M W 4:10-5:25.

W3111x. Intermediate Mathematics for Economists.

Elementary set theory, matrices and vectors, linear algebra, differential and integral calculus, with some applications to economic theory. Prerequisite: Courses 1 and 2. Mr. KOEUNE. M W 4:10-5:25.

W3212y. Introduction to Mathematical Economics.

The application of mathematical techniques to economic analysis. The theory of the firm and competition; theory of demand; static macroeconomic models. Mathematical tools are developed as needed. Mr. KOEUNE. Tu Th 4:10-5:25.

G4311x-G4312y. Economic History of the United States.

Economic development of the United States, with special attention to the forces and factors responsible for economic growth: innovation, capital formation, transportation, banking, international trade and capital movements, immigration, and the labor supply. The interactions of the public policy and private decision making. PROFESSOR PASSELL. F 2:10-4.

G4901x. Introduction to International Economics.

An introduction to the role of international trade in resource allocation and the consequence of trade for economic welfare; the balance of payments and foreign exchange market; balance of payments disequilibrium and adjustment; international financial institutions and policy; the theory of protection and commercial policy; trade and development; economic integration. Consent of Barnard department and major adviser required. Professor Lawrence. M W 11.

C3041x. Monetary Economics.

Nature and role of money and credit; demand for and supply of money; banking, central banking and the role of the Federal Reserve System. Concept and measurement of income, wealth, employment and price levels. Economic models; consumption, savings, investment. Real and monetary forces in income determination. Prerequisite: Courses 1 and 2. Mr. Gold. M W F 10.

C3042y. Monetary Policy.

Intermediate macroeconomic and monetary theory applied to policy problems. Issues in history, theory, and policy applications in the United States; capital markets and interest rates, employment, inflation, economic growth; monetary aspects of international economics. Prerequisite: Courses 1 and 2 and C3041x. Mr. Gold. M W F 10.

G4713x-G4714y. Financial Institutions.

A study of the functioning of the principal public and private agencies comprising the financial system of the United States; their relation to the flow of money payments and the process of capital formation. Open to seniors. Prerequisite: Courses 1 and 2 and at least two other courses in economics. Professor Saulner. Tu 2:10-4.

G4453x. Industrial Relations.

Contemporary developments and trends in industrial relations in industrialized countries; role of trade unionism; theory and practice of collective bargaining; impact of technology and structural economic change. Regulation of industrial conflicts; problems of joint consultation and joint management arrangements; industrial relations in regulated and public enterprises. Relevance of industrial relations to national economic planning. Consent of Barnard department and major adviser required. Professor Warner. F 4:10-6.

W3251x. Industrial Organization and Public Control of Industry.

Organization and structure of American industries and their markets. Competitive behavior, pricing policies, and market performances. Antitrust policy and leading antitrust cases. A research paper required. Professor Warner. Tu Th 1:10-2:25.

W3228y. The Urban Economy.

Past and present economic functions of cities. Growth of metropolitan areas. Location theory; theories of site rent and urban form; analysis of the urban economic base. Impact of changing technology and social structure on central cities and suburbs. Problems of older central cities, including transportation, public finance, housing, and urban renewal. Effects of federal policy. The future of the city. Mr. KOBLENTZ. Tu Th 2:40-3:55.

G4328x. Yugoslav Economic Planning.

Development planning in postwar Yugoslavia. Central planning, investment planning, indicative planning. Workers councils as the entrepreneur. National and regional growth strategies and the results. Professor Milenkovitch. Th 2:10-4.

F3512y. Comparative Economic Systems.

Analysis of economic systems as a whole. Comparison of socialism and capitalism as economic systems, and of planning and the market as coordination mechanisms. Theoretical models of capitalism and socialism. Economics to be examined: the United States, Western Europe, the less-developed countries; the Soviet Union, Cuba and Yugoslavia. Neoclassical and Marxian analyses to be used. Prerequisite: Courses 1 and 2. Mr. Agosin. M W 6:10-7:25.

GRADUATE COURSES

Certain other graduate courses given at Columbia University are open to qualified majors with the consent of the department and the major adviser. A description of these courses will be found in the Bulletin of the Graduate School of Arts and Sciences and the Graduate School of Business.

EDUCATION

The following interdepartmental program is supervised by the Committee on Education:

MARTHA PETERSON, President, ex officio

JOSEPH G. BRENNAN, Professor of Philosophy

LAWRENCE A. CREMIN, FREDERICK A. P. BARNARD Professor of Education, Teachers College, Columbia University

Patricia Albjerg Graham, Associate Professor of Education (Chairman; 326B Milbank Hall)

ANNETTE K. BAXTER, Associate Professor of History

DEMETRIOS CARALEY, Professor of Government

EDWARD S. COBB, Assistant Professor of Psychology

PATRICK X. GALLAGHER, Professor of Mathematics

RENÉE GEEN. Associate Professor of French

BARRY ULANOV, Professor of English

The Education Program does not constitute a major; it is taken in conjunction with a major in some other subject.

The program is open to qualified Barnard students who wish to teach in junior or senior high schools. With the psychology requirement (Psychology 5 or 27), either History 65, or Philosophy 84, and a course in methods of teaching a specific subject, a student who completes the Education Program receives a New York State Provisional license, which is valid for five years. A permanent license requires a master's degree, which need not include any additional work in education.

All students are enrolled in Education 3-4, which is directly concerned with the principles and practice of classroom teaching.

Before the end of the sophomore year, students interested in teaching should confer with the director of the Education Program. Juniors who wish to apply for admission to the program should file application forms, which may be obtained in the office of the Education Program during the Autumn Term.

Education 3-4. Introduction to Teaching in the Secondary School. [9]

This course affords observation and student teaching in secondary schools. The accompanying seminar examines contemporary issues in American education. Individual conferences assess pedagogical problems encountered in student teaching. Student teaching may be done, preferably during one term four to five half-days a week, or during two terms two half-days a week. All students participate in the seminar during both terms. If all student teaching is done in one term, it will be designated Education 3 (I) or 4 (I) and will be considered equivalent to two courses, even though credit for Education 3-4 will be equally distributed in both terms. Prerequisite: admission to Education Program. Instructor to be announced. Seminar: Tu 2:10-4.

EDUCATION

History 65. History of Education in the United States.

[5]

The development of American education in the context of social and intellectual history. Professor Graham. M 2:10-4.

Philosophy 84. Philosophy of Education.

[4]

Classical readings include Plato's Republic and Rousseau's Emile. The idea of individualism, in both its European and American forms, is traced from Rousseau to Dewey, leading to discussion of problems in present day American educational ideology. Selected readings are assigned concerning ideas of "middle class" and black education. Discussion of theories of higher education is supported by readings from Newman's The Idea of a University as well as some related to recent events in American universities. Professor Brennan. M W F 1:10.

English 98. XII The Teaching of English.

[0]

Primarily for students in the Education Program. PROFESSOR PRESCOTT. M 2:10-4.

History 63. Problems in the Teaching of History.

[17]

The selection and organization of content for junior and senior high school history courses; use of primary sources, secondary readings, and other relevant materials; problems of evaluation. Primarily for students in the Education Program; others by written permission of the instructor. Mr. Clemens. M 4:10-6.

ENGLISH

Professors: John A. Kouwenhoven, David A. Robertson, Jr., Eleanor Rosenberg, Eleanor M. Tilton, Barry Ulanov2 (Chairman; 408D Barnard Hall)

ADJUNCT PROFESSOR: HOWARD M. TEICHMANN

ASSOCIATE PROFESSORS: KENNETH H. JANES (Director of Minor Latham Playhouse), RUTH M. KIVETTE (Departmental Representative, 408A Barnard Hall), JOANN RYAN MORSE, RICHARD A. NORMAN, REMINGTON P. PATTERSON

ADJUNCT ASSOCIATE PROFESSORS: JOY CHUTE, ELIZABETH HARDWICK, ELLEN MOERS

ASSISTANT PROFESSORS: LOIS A. EBIN, ANTHONY G. HENDERSON, ANNE LAKE PRESCOTT, MAIRE J. SAID (Director of English A, 422 Barnard Hall), CATHERINE R. STIMPSON

ASSOCIATES: ELIZABETH CAUGHRAN, MARJORIE HOUSEPIAN DOBKIN

LECTURER: JANICE FARRAR THADDEUS (Examinations Officer)

INSTRUCTORS: ELIZABETH DALTON, RUTH M. MATHEWSON, DONALD PACE, CHRISTINE ROYER

ASSISTANTS: MARGARET D. HANCE, JANET SOARES

All courses in English are open to nonmajors. The course descriptions list prerequisites and state which classes have limited registration.

A student majoring in English is expected to increase her knowledge of literary history and the development of the English language, to become familiar with the works of a number of the principal writers in English, to gain in ability to interpret and appreciate a variety of literary texts, and to improve her speech and her writing. The major will be required to demonstrate achievement in the disciplines and procedures of English through long essays written in the senior seminars.

In consultation with her departmental adviser, the major will plan her program to include a distribution of courses that present the major writers, the major periods, and the significant genres of the literature. All majors will take course 93 (or 93y) in the sophomore or junior year, and Course 59-60, the English Colloquium, in the junior year. In addition, a major in literature will take one section of Course 97 and one section of Course 98. A major in writing will be required to do a long piece of work in her senior year, in one of the advanced writing courses. A major in speech will work on a special senior project in one of the advanced courses in her special field.

¹ Absent on leave, Autumn Term.

² Absent on leave, Spring Term.

Absent on leave, 1970-71.

INTRODUCTORY

A. Reading and Writing.

[0]

An approach to literary skills through intensive reading, regular assignments in composition, and discussion; frequent individual conferences with the instructor. Prescribed for all freshmen. Other English courses open to freshmen in the Autumn Term are Courses 21 and 27, either of which may be taken parallel to A. With the written permission of the instructor, a freshman may elect a literature course in the Spring Term. Professor Said and Members of the Department. Sections of Course A meet at the following hours: M W F 9, 10, 11, 12:10, 1:10, 2:10. Tu Th 9:10-10:25, 10:35-11:50, 2:10-3:25.

Room assignments will be posted outside 401 Barnard Hall.

Special Seminar in Reading and Writing.

[0]

For students who want additional work in reading and writing at the first-year level. Special reading topics. Professor Ebin and Miss Dalton. Hours to be arranged.

40. Seminars on Special Themes.

[0]

Each section will examine in detail a topic which relates the study of literature and the use of the English language to other disciplines. Frequent papers and individual conferences. Section schedule will be announced in November 1970. Topics offered in the Spring Term 1971 will include British Institutions, Images of Women, The City in Literature, The Hero and Anti-hero in Literature, The Uses of Fantasy in Literature, The Contemporary British Stage, Psychoanalytic Approaches to Literature, Modern Irish Writers, Books and the Black Experience in America.

Open to a limited number of freshmen and sophomores who have satisfied the basic requirement in English A, and juniors and seniors if numbers permit. Registration through the class advisers. Course 40 may be accepted, with the approval of the major adviser, in partial fulfillment of the major requirement.

MEMBERS OF THE DEPARTMENT. Sections will meet at the following hours: M W F 10, 11, 12:10; 1:10; 2:10. Tu Th 9:10-10:25; 10:35-11:50; 2:10-3:25.

WRITING

Registration in each course is limited, and the written permission of the instructor is required; signed departmental registration blanks are to be filed with MRS. HANCE (417 Barnard Hall). Before registering for a course numbered 7-14, a student should have earned a grade of B—or better in at least one of the courses numbered 3-6. Two writing courses may not be taken concurrently unless one of the two is Course 13 or 14. Course 93 (or 93y) is to be counted as a writing course.

3, 4. Structure and Style.

[0]

English composition above the first-year level. Frequent individual conferences. Students may take either term or both.

- I. Fiction and personal narrative. MISS DALTON. W 3:10-5.
- II. Essays. Professors Kouwenhoven and Ebin. Tu 3:35-5:25.
- III. Autumn Term: exposition. Spring Term: poetry. Mrs. Thaddeus. M 2:10-4.

Advanced Composition. 6.

[0]

The members of the class will keep daily journals and work up the material in finished papers, fiction and nonfiction. Mrs. Dobkin. Th 3:10-5.

7, 8. Experiments in Writing.

[0]

Advanced work in various forms. Individual conferences with the instructor. Professor Hardwick. Th 2:10-4.

11, 12. Story Writing.

[0]

Advanced work in writing, with emphasis on the short story. Individual conferences with the instructor. Some experience in the writing of fiction is prerequisite to this course. Professor Chute. Tu 4:30-5:25.

13, 14. Dramatic Writing.

The development of a dramatic situation in terms of short fiction, the theater, television, motion pictures, and radio. Completed works are discussed, given dramatic readings by the class, and recorded on tape. PROFESSOR TEICHMANN. Tu Th 2:10-3:25.

SPEECH AND DRAMA

The work of English majors with a special interest in speech should include Course 21 and two half-year courses in public speaking, discussion and debate, voice and diction, or oral interpretation. To elect any course in speech, a student must secure the written permission of PROFESSOR NORMAN or MISS CAUGHRAN. The Barnard College Theatre Company and the Columbia radio station, WKCR, offer practical experience.

Students who have a special interest in the drama will find a summary of activities and courses related to that field on page 81.

21[or 21y]. The Uses of Speech.

Training in voice production and clear articulation. Designed to improve the student's speech through drill, practice in reading aloud, the presentation of oral reports, and extemporaneous speaking. Use of the language laboratory. Registration limited to 15 students. Miss CAUGHRAN. M W F 11.

[22. American and British Dialects.

Not given in 1970-71.]

MISS CAUGHRAN.

23, 24. Oral Interpretation of Literature.

101

Study of literary texts for oral performance. Autumn Term: fictive prose and poetry, with class projects exploring reading modes from informal presentation to reader's theater. Spring Term: dramatic poetry and drama. MISS CAUGHRAN. M W F 10.

27y. Public Speaking.

[0]

Study of the basic principles of informal and formal speaking with emphasis on the selection and organization of materials, on audience psychology and on effectiveness of delivery. MISS CAUGHRAN. M W F 1:10.

[28. Persuasive Speaking.

Not given in 1970-71.]

Professor Norman.

29. Introduction To The Theater.

[0]

A survey of theater history with special attention to the interrelation of dramatic literature, styles of production, and theater architecture. The theater's place in society. Individual and group project in related research. Mr. Pace. Tu Th 2:10-3:25.

33, 34. Play Production.

[0]

A study of the technical aspects of the theater and the ways in which they complement the work of the playwright, director, choreographer, and actor. Guest lecturers from the professional theater. Permission of the instructor required. Professor Janes and Messrs. Pace and Parichy. M 3:10-5. Lab. W 3:10-5.

35, 36. The Actor's and Director's Interpretation of Dramatic Literature.

[0

Study and practice in classic and contemporary dramatic literature by actors and directors. Permission of the instructor required. Professor Janes. F 3:10-5.

English 38x. Critical Writing on Dance.

A close examination of 19th and 20th century dance criticism, with practice in writing descriptively about movement and in composing critical analyses of dance performances. Prerequisites: Music V1109x, V1110y (History of Dance) and permission of the instructor. Mr. SORELL. M 2:10-4.

LANGUAGE AND LITERATURE

For nonmajors, courses marked § will count toward the general college requirement. Course 40 (see page 91) may be accepted, with the approval of the major adviser, in partial fulfillment of the major requirement.

§51, 52. An Introduction to Literary History.

A general view of the scope and variety of English literature and its place in world literature through study of selected writers and their works. Autumn Term: Chaucer through Milton. Spring Term: Dryden to the present. PROFESSORS PRESCOTT and MORSE. Autumn: M W F 1:10 [4] Spring: M W F 11 [3].

[53. Anglo-Saxon Language and Literature. Not given in 1970-71.]

\$55. Chaucer.

Chaucer's Canterbury Tales. Professor Ebin. Tu Th 10:35-11:50.

[\$56. Chaucer and his Contemporaries. Not given in 1970-71.]

[58. Medieval Literature. Not given in 1970-71.]

59-60. The English Colloquium.

[0]

The major writers, major works, and major genres of the literature from the late fifteenth century to the late eighteenth century, examined in terms of the leading ideas of the period. Required of junior majors; election by non-majors if numbers permit.

- I. The Traditions of Love. An exploration of the literary modes in which ideas about love found expression: God's love of man and man's love of God; courtly love, Petrarchan love, neoplatonic love, and romantic love; love of mankind expressed as concern for society. Professors Rosenberg and Prescott. M 2:10-4. Third hour to be arranged.
- II. Appearance and Reality. The discovery of inner, outer, and other worlds in literature: reality masked and unmasked; art, artifice, and nature; new science and old nature; changing definitions of nature and the nature of man. Autumn: Professors Kivette and Ebin. Spring: Professors Kivette and Henderson. W 3:10-5. Third hour to be arranged.
- III. Ideas of Order and Disorder. Form and structure achieved or defeated in the work of art and in the world. The rise of the man of letters and vernacular literature. The drama of self-definition. The development of modern notions of subjectivity, self-confidence, and revolutionary change. Autumn: Professors Ulanov and Said. Spring: Professors Morse and Said. Th 3:35-5:25. Third hour to be arranged.

\$63, 64. Shakespeare.

[3]

A critical and historical introduction to Shakespeare. About fifteen plays—comedies, histories, and tragedies—will be read each term, with emphasis on the major plays in the Autumn Term. PROFESSOR PATTERSON. M W F 11.

[\$66. Spenser and the Tudor Renaissance. Professor Rosenberg.

Not given in 1970-71.]

[\$67. Donne and Seventeenth-Century Literature. Not given in 1970-71.] PROFESSOR ROSENBERG.

[§68. Milton.

Not given in 1970-71.]

PROFESSOR KIVETTE.

§69y. Renaissance Drama.

[5]

Major plays of the English Renaissance from the Tudor interlude to the closing of the theaters, with emphasis on Marlowe, Jonson, and Webster. Professor Patterson. M W F 2:10.

§72. The Novel.

[12]

The central English tradition, including works by Defoe, Richardson, Fielding, Austen, Bronte, Thackeray and Dickens. PROFESSOR MOERS. M W F 12:10.

[\$73. The Augustan Age. Professor Henderson.

Not given in 1970-71.]

[\$74. The Later Eighteenth Century. PROFESSOR HENDERSON.

Not given in 1970-71.]

- §75. Prose and Poetry of the English Romantics. [6]
 The thought and style of Blake, Wordsworth, Coleridge, Hazlitt, Lamb,
 De Quincey, Byron, Keats, and Shelley. Professor Tilton. Tu Th
 9:10-10:25.
- §77. The Victorian Age in Literature.
 Prose and verse concerning problems of society and of religion:
 Carlyle, Disraeli, Macaulay, Mill, Newman, Huxley, Tennyson, Browning, Arnold. Professor Robertson. M W F 2:10.
- \$78. Victorian Poetry and Criticism.

 Poems by Tennyson, Browning, Arnold, Rossetti, Meredith, Morris, and Swinburne. Essays by Ruskin, Arnold, Meredith, Pater, and Wilde. Professor Robertson. M W F 2:10.
- §79. American Literature, 1775-1885. [9]
 The Revolutionary period and the major American Romantics: Hawthorne, Poe, Melville, Emerson and the Transcendentalists, Whitman. PROFESSOR TILTON. Tu Th 2:10-3:25.
- 880. American Literature, 1865-1965.

 The experimenters in prose and poetry from James to the present.

 MISS ROYER. Tu Th 2:10-3:25.
- 882. Seminar in American Literature.

 Melville, Whitman, and a twentieth-century writer to be chosen by the student in consultation with the instructor. Professor Kouwenhoven. W 9-11
- [83. Modern Literature and the Allied Arts. Not given in 1970-71.] PROFESSOR ULANOV.
- 84 (Art History 84). The Vernacular in the American Arts of Design. [13] The conflict between the "cultivated" and "vernacular" styles. The development of an American aesthetic in technology, architecture, fine arts, literature, and other arts. Professor Kouwenhoven. Tu 3:35-5:25.
- 885. Modern British and American Poetry. [9]
 The thought and style of Hopkins, Yeats, Frost, Robinson, Pound, Eliot, Stevens, and more recent writers; the literary movements with which they are associated. Professor Ulanov. Tu Th 2:10-3:25.
- [86. Drama from Ibsen to the Present. Not given in 1970-71.] PROFESSOR ULANOV.
- 87y. Major American Writers and Their Foreign Sources.

 Independent study of related works by British, European and American writers of the period 1836-1916. Prerequisite: Course 79 or 80 and a reading knowledge of a modern language. Permission of the instructor required. Professor Tilton. Th 3:35-5:25.
- §88. The Modern Novel.

 Works by James, Conrad, Lawrence, Joyce, Forster. Professor Morse.

 M W F 2:10.
- [90. The English Language: History and Use. Not given in 1970-71.] PROFESSOR NORMAN.

93 (or 93y). Literary Criticism: Analysis and Evaluation.

The purpose of the course is to provide experience in the reading of literary texts and some knowledge of conspicuous works of literary criticism. Frequent short papers. Registration in each section is limited. Students must file departmental registration forms with Mrs. Hance (417 Barnard Hall) before completing their programs.

All English majors are required to take Course 93 (or 93y) in the junior year. Transfer students should plan to take it in the Autumn Term. If registration allows, a few sophomores and nonmajors may be admitted on application.

PROFESSORS ROBERTSON, ROSENBERG, TILTON, KIVETTE, HENDERSON, and STIMPSON. Section I Tu 3:35-5:25. Section II W 3:10-5. Section III Th 3:35-5:25.

97, 98. Studies in Literature.

[0]

[0]

Open to majors and nonmajors. These seminars provide opportunities for intensive study of subject matter to which students have already been introduced in other courses. Registration in each section is limited, and written permission of the instructor is required. Departmental registration forms must be secured from MRS. HANCE and returned to her (417 Barnard Hall).

All English majors who elect advanced work in literature, rather than in writing or speech, are required in the senior year to take one section of 97 and one of 98. Other students will be admitted to the seminars if the section lists have not been filled.

97. (Autumn Term)

- II. Shakespearean Comedy and Modern Criticism. Professor Patterson. Tu 3:35-5:25.
- IV. Eighteenth Century Studies: The Uses of Wit. Professor Hen-DERSON. Th 3:35-5:25.
- VII. Women Novelists in America. MISS ROYER. W 3:10-5.
 - X. Critical Theory and Critical Taste. Professor Rosenberg. W 3:10-5.
- XIII. The Death of the Hero: Studies in Tragedy. MISS DALTON. Tu 3:35-5:25.

98. (Spring Term)

- I. Science and the Imagination: The Impact of Scientific Discovery upon English Renaissance Literature. Professor Rosenberg. W 3:10-5.
- III. Milton and His Critics. Professor Kivette. Th 3:35-5:25.
 - V. The Romantic Survival, British and American. Professor Tilton. W 3:10-5.
- VI. The Turn of the Century. Professor Robertson. Th 3:35-5:25.
- IX. Film and Word. Professor Stimpson. Tu 3:35-5:25.
- XII. The Teaching of English. Primarily for students in the Education Program. Professor Prescott. M 2:10-4.
- XIV. The Initiation Rite in Modern Literature. MISS ROYER. W 3:10-5.

FRENCH

PROFESSORS: HELEN PHELPS BAILEY, LEROY C. BREUNIG, MAURICE Z. SHRODER

ASSOCIATE PROFESSORS: SERGE GAVRONSKY, RENEE GEEN (Chairman, 305 Milbank Hall), Tatiana Greene

Assistant Professors: Danielle Haase-DuBosc, Hermine Riffaterre, Domna Stanton

LECTURER: PATRICIA TERRY

INSTRUCTORS: EVA CORREDOR, MAXINE CUTLER, EDWARD KAPLAN, SYLVIE SAYRE

OFFICERS OF COLUMBIA UNIVERSITY OFFERING COURSES OPEN TO BARNARD STUDENTS:

PROFESSORS: DONALD M. FRAME, JEAN S. SAREIL

ASSOCIATE PROFESSOR: NATHAN GROSS

ASSISTANT PROFESSORS: WILLIAM E. BEAUCHAMP, JEAN-MARC BLANCHARD, RICHARD RASKIN, NAOMI SCHOR, SUSAN M. SULEIMAN

The objective of a student majoring in French is twofold: a) to perfect fluency in the written and the spoken language and b) to develop an understanding and appreciation of the literature and culture of France.

The student in consultation with her major adviser will plan her program to include the following Barnard courses: either Course 21-22, 23-24 or 25-26; two of the language courses 12, 13, 14, 16; four one-term literature courses numbered 31-42; two one-term seminars numbered 51-54. Seniors with honor grades may elect Course 59-60, senior thesis.

The program may include additional courses from the Barnard and Columbia College departments' offerings as listed along with work in related fields such as art history, French history, and other subjects which vary with the interest of the student. Majors who plan to do graduate work are urged to acquire a reading knowledge of Latin.

Examinations: 1. The junior French Test, given in December and April of each year, is a two-hour written examination on literary history, literary terminology and translation. Students may take the test at any time before the end of the junior year. (Students who spend the junior year abroad may take the test in December of the senior year.)

2. The major examination consists of a three-hour critical essay on a prepared question and an individual oral explication de texte of approximately a half-hour. The examination is based on a selected list of master-pieces which new majors should obtain from their advisers. Students who take Course 59-60 (senior thesis) will be exempt from the written exam, and the thesis defense will constitute the oral section. With special permission, students may take Course 59 or 60 alone, but they will not be exempt from the major examination.

¹ Absent on leave, Spring Term.

Foreign Language Requirement for the Degree: New students who have already given evidence of advanced training in French may automatically be exempted from the requirement. All other new students who intend to satisfy their foreign language requirement in French will, depending upon their preparation, be placed immediately in the appropriate language course or be asked to take a placement test or an exemption test. Those receiving a sufficiently high grade in the latter test will fulfill the requirement. The others may do so by completing Course 4.

LANGUAGE COURSES

All courses are conducted in French.

1-2. Elementary Full-Year Course.

[14]

Grammar, reading, composition. Work in the language laboratory is required. Mrs. Corredor (course chairman) and Mrs. Sayre. Section I M Tu W Th F 9. Section II M Tu W Th F 10.

2x. Review of Elementary French.

[14]

Oral and written review of basic grammar and syntax. Translation, reading, oral practice, free composition. Work in the language laboratory is part of the course. Primarily for students who need further instruction to qualify for the intermediate course. Professor Geen (course chairman) and Members of the Department.

Section I M W F 10.

Section III Tu Th 10:35-11:50.

Section II M W F 12:10

3. Intermediate Course.

[14]

Grammar and syntax. Translation, reading, oral practice, free composition. Work in the language laboratory is part of the course. Prerequisite: Course 1-2, Course 2x, or an appropriate score on the placement test. Professor Haase-DuBosc (course chairman) and Members of the Department.

Section I M W F 11

Section III M W F 1:10

Section II M W F 12:10.

Section IV Tu Th 10:35-11:50.

3y. Intermediate Course.

[14]

The equivalent of Course 3 but given in the Spring Term. Dr. CUTLER (course chairman) and MEMBERS OF THE DEPARTMENT.

Section I M W F 10.

Section III Tu Th 10:35-11:50.

Section II M W F 12:10.

4. French through Literary Analysis.

[14]

The study of literary texts from Pascal to Rimbaud as a basis for improving the comprehension of written and spoken French. Work in the language laboratory is part of the course. Prerequisite: Course 3 or an appropriate score on the placement test. Professor Riffaterre (course chairman) and Members of the Department.

Section I M W F 11

Section III M W F 1:10

Section II M W F 12:10.

Section IV Tu Th 10:35-11:50.

4x. French through Literary Analysis.

[14]

The equivalent of Course 4 but given in the Autumn Term. Professor Gavronsky (course chairman) and Members of the Department.

 Sec.
 I
 M W F 9.
 Sec.
 V
 Tu Th 9:10-10:25.

 Secs.
 IIa and b M W F 10.
 Secs.
 VI
 Tu Th 10:35-11:50.

 Secs.
 IIIa and b M W F 11.
 Secs.
 VII
 Tu Th 2:10-3:25.

Secs. IVa and b M W F 12:10.

6. Composition and Conversation

[0]

Weekly compositions designed to improve writing skill. Review of grammar and syntax. Pronunciation, recitation, conversations based on selected readings. Work in the language laboratory is part of the course. Prerequisite: Course 4 or a satisfactory score on the placement test. Limited to 15 students. Professor Riffaterre. M W F 1:10.

11. Advanced French Grammar.

[0]

A systematic study of morphology and syntax. Exercises and free composition. Professor Riffaterre. M W F 1:10.

12. History of the French Language.

[3]

A study of the distinguishing characteristics of the French language in their relation to literary expression from the Middle Ages to the present. Prerequisite: French 21-22 or permission of the instructor. Dr. Terry. M W F 11.

13. Advanced Composition and Explication.

[0]

Free composition on various themes; practice in methods of explication de texte. Nonmajors may take the course with permission of the instructor. Professors Greene and Riffaterre. M W F 2:10.

14. Advanced Translation.

[0]

Translation of various styles of prose and poetry from French to English and from English to French. Nonmajors may take the course with permission of the instructor. Dr. Terry and Professor Haase-DuBosc. M W 2:10-3:25.

16. Advanced Oral French.

[0]

Study of spoken French. Practice in pronunciation and intonation through conversation and oral explications de texte. Work in the language laboratory is part of the course. Nonmajors may take the course with permission of the instructor. Professor Riffaterre. M W F 10.

LITERATURE COURSES

For non-majors, courses marked thus § will count toward the general college requirement. All Barnard courses are conducted in French except Course 48.

§20. Special Themes in Modern French Literature.

Reading and discussion in French of selected works of contemporary interest. Textual analyses and essays. Each section will examine one of the following themes:

- I. The Changing Meaning of Negritude.

 A study of the poetry, plays, essays, novels and criticisms of some of the leading African and Caribbean writers including Senghor, Laye, Diop, Cesaire, Fanon, Boukman, Roumain and Depestre. Professor Gavronsky. M W F 9.
- II. Transposition of the Novel into Film.

 A study of the adaptation of modern fiction to the film through an analysis of the elements, techniques and conventions of each art. Authors include Gide, Mauriac, Cocteau, Bernanos, Duras, Sagan, Robbe-Grillet; Delannoy, Franju, Cocteau, Bresson, Resnais among film directors. Dr. Cutler. M W F 10.
- III. The Theater of the Absurd.

 Adamov, Arrabal, Beckett, Genet and Ionesco. Professor Geen.

 M W F 11.
- IV. The Writings of French Painters.

 Selections from Delacroix to Dubuffet. A study of the artist's views on art, aesthetics and his contemporary world. Professor Haase-DuBosc. M W F 1:10.
- V. Poets and their Gods.

 Close reading of selected poems by Hugo, Vigny, Lamartine, Claudel, Daumal, Jabes, La Tour du Pin, with emphasis on the ways in which they use the idioms of Romantic pantheism, Christianity, Judaism, Hinduism, etc. to express their personal visions. Mr. Kaplan. Tu Th 9:10-10:25.
- §20x. Special Themes in Modern French Literature.

 The equivalent of Course 20 but given in the Autumn Term.
 - I. Feminism.

 The role and struggle of women as seen by authors of the nineteenth and twentieth centuries. Readings from G. Sand, Michelet, Balzac, Colette, Simone de Beauvoir, H. Bazin, C. Rochefort and others. Mrs. Sayre. M W F 12:10.
 - II. America in French Fiction.

 Images and criticism of American society in the works of Celine,
 Giraudoux, Sartre, Simone de Beauvoir and Butor. PROFESSOR
 STANTON. M W F 1:10.
 - III. Existentialism. [7]
 Fiction, drama and essays by Sartre, Camus, Malraux and Saint-Exupery. Professor Shroder. Tu Th 10:35-11:50.
- §21-22. Masterpieces of Literature from the Middle Ages to the Twentieth Century. [14]

Lectures and discussions in French on the history of French literature. Analysis of texts, essays, and reports on outside reading. Autumn Term: La Chanson de Roland through Moliere. Spring Term: Voltaire through Proust. Prerequisite: satisfaction of the foreign language requirement in French. Professors Bailey, Shroder (course chairman Spring Term), Stanton (course chairman Autumn Term), Dr. Cutler, Mr. Kaplan and Mrs. Sayre. Section I M W F 10. Section II M W F 11. Section III Tu Th 10:35-11:50.

§21y. Masterpieces of Literature from the Middle Ages to the Twentieth Century. Part I. [7]

The equivalent of Course 21 but given in the Spring Term. Credit for Course 21y only on completion of Course 22x. Professor Stanton. Tu Th 10:35-11:50.

\$22x. Masterpieces of Literature from the Middle Ages to the Twentieth Century. Part II. [4]

The equivalent of Course 22 but given in the Autumn Term. Prerequisite: Course 21 or the equivalent. Professor Greene. M W F 1:10.

- [§23-24. The Culture and Institutions of France. Not given in 1970-71.] PROFESSOR GAVRONSKY.
- §25-26. French Historical Prose

[2]

A study of the masterpieces of French historical writing from the Middle Ages to the present. Autumn Term: Villehardouin to Condorcet. Spring Term: from Mme. de Stael to De Gaulle. Prerequisite: the same as for Course 21-22. PROFESSOR GAVRONSKY. M W F 10.

[\$31. The Middle Ages. Dr. Terry.

Not given in 1970-71.]

§32. Renaissance and Classical Prose.

Not given in 1970-71.]

§33. Renaissance, Baroque and Classical Poetry.

[10]

The meaning and function of French poetry in the sixteenth and seventeenth centuries. Ronsard to La Fontaine. Studies of the courtly love lyric, philosophical and political poetry, baroque nature poetry and examples of the classical style. Prerequisite: Course 21-22, 23-24, 25-26 or permission of the instructor. Professor Haase-DuBosc. M W 3:10-4:25.

§34. The French Theatre of the Seventeenth Century.

[9]

The masterpieces of Corneille, Racine and Moliere. Prerequisite: the same as for French 33. PROFESSOR STANTON. Tu Th 2:10-3:25.

C3667x. The Classical French Theatre.

Corneille, Racine, Moliere, Marivaux, Beaumarchais, and others. Conducted in French: discussion and written work in English. Prerequisite: the same as for French 33. Professor Gross. M W 11-12:15.

- S35. The French Theatre of the Eighteenth and Nineteenth Centuries. [3] Evolution of French drama from the drame bourgeois through the Symbolist theatre. The main authors studied will be Diderot, Beaumarchais, Hugo, Vigny, Musset and Maeterlinck. Prerequisite: the same as for French 33. Professor Geen. M W F 11.
- [§36. Eighteenth Century (II).

Not given in 1970-71.]

§37. Nineteenth Century French Poetry.

[2]

A study of lyrical themes (nature, woman, love, death, the orphic vision, the supernatural, the subconscious and the world of dreams) from Romanticism through Symbolism. Prerequisite: the same as for French 33. PROFESSOR RIFFATERRE. M W F 10.

§38. The Nineteenth Century French Novel.

[6]

Fiction from the pre-Romantic period to the eve of the First World War, including works by Chateaubriand, Constant, Stendhal, Balzac, Flaubert, Zola, and Proust. Prerequisite: the same as for French 33. Professor Shroder. Tu Th 9:10-10:25.

C3676y. The Romantic Movement in France.

The principal tendencies, primarily in literature, and related to major social phenomena (the triumph of the bourgeoisie, the beginnings of socialism, the revolutions of 1830 and 1848). The central figures studied will be Chateaubriand, Hugo, Berlioz, Delacroix, Vigny, Stendhal, Balzac, Baudelaire. Conducted in English; readings in French. Prerequisite: the same as for French 33. Professor Beauchamp. M W 2:10-3:25.

C3673x. The Impressionist Era.

Painting, literature, music, and thought in France from about 1870 to 1900, primarily in relation to the social history of the period. Ideological dimensions of major aesthetic movements, including Naturalism, Impressionism, and Symbolism. Conducted in English. Prerequisite: permission of the instructor. PROFESSOR RASKIN. M W 2:10-3:35.

C3653x, C3654y. French Prose Fiction Since 1900.

C3653: the novel through the twenties: Proust, Gide, Martin du Gard, Mauriac, Bernanos, Breton, Montherlant, and others. C3654: evolution of the novel from the "social thirties" to the *nouveau roman*: Malraux, Celine, Aragon, Sartre, Camus, Beckett, Butor, Robbe-Grillet, and others. Conducted in French; discussion and written work may be in English. Prerequisite: the same as for French 33. Professors Schor and Suleiman. Tu Th 11-12:15.

[§39. Twentieth Century (I).

Not given in 1970-71.]

§40. Twentieth Century French Poetry.

[7]

Cubism, dada and surrealism. Prerequisite: the same as for French 33. Professor Breunig. Tu Th 10:35-11:50.

C3668y. The Renewal of the French Theatre in the Twentieth Century.

An examination of some of the most important but little known developments in the evolution of the modern French theatre: Jarry, Artaud, Vitrac, Vauthier, Genet, Arrabal. Conducted in French; discussion and written work may be in English. Prerequisite: the same as for French 33. Professor Blanchard. M W 11-12:15.

[§42. Materials and Techniques of French Poetry. Not given in 1970-71.]

§48. French Thought from Romanticism to Surrealism.

[3]

A study of the major trends in the evolution of French thought as illustrated in the works of Chateaubriand, Lamartine, Baudelaire, Michelet, Berlioz, Delacroix, Comte, Lautreamont, Bergson, Claudel, Apollinaire and Breton. Prerequisite: completion of the language requirement in French. Readings in French; lectures, discussions and papers in English. Professor Gavronsky. M W F 11.

C3675x. The Quest for Sincerity from Villon to Camus.

Theory and practice of sincerity in selected major writers, notably Villon, Du Bellay, Montaigne, Moliere, Rousseau, Diderot, Stendhal, Gide, and Camus. Concern with sincerity to self, to the reader, to the work. Sincerity as an aesthetic; as emotion; as spontaneity; as disponibilite, as an impossibility for the human consciousness. Conducted in French; discussion and written work may be in English. Prerequisite: the same as for French 33. PROFESSOR FRAME. Tu Th 2:10-3:25.

C3678y. The Comic in France.

Study of the principal French comic writers, with emphasis on comic style: Rabelais, Moliere, Voltaire, France, Queneau, Ionesco, and others. Conducted in French; discussion and written work may be in English. Prerequisite: the same as for French 33. PROFESSOR SAREIL. Th 2:10-4.

SEMINARS

The number of students in each seminar is limited and written permission is required in advance of registration period.

- 51. Francois Villon.

 DR. TERRY. M W 1:10.
- 52. Descartes and Pascal as Readers of Montaigne. [0]
 PROFESSOR GREENE. M W 1:10.
- 53. Flaubert.
 PROFESSOR SHRODER. Tu Th 2:10.
- 54. Baudelaire. [0]
 PROFESSOR STANTON. Tu Th 3:35-4:25.

59-60. Senior Thesis. [0]

Research into a precise topic of French literature and the preparation of a long essay. Open to seniors with honor grades. The essay satisfies in part the major examination requirement. Course 59 or 60 may be taken alone with special permission. Professors Breunig and Shroder. Hours for consultation to be arranged.

GRADUATE COURSES

The following graduate courses are given in English by members of the Barnard French Department. They are open to undergraduates only by written permission of the instructor. French majors may take them in addition to, but not in lieu of, the four literature courses and the two seminars as set forth in the major requirements.

G4603x. French Poetry in the Twentieth Century. Professor Breunig. W 2:10-4.

G4505x. French Novel of the Nineteenth Century. PROFESSOR SHRODER. F 10-11:50

[G6705x. Theory of the Novel. PROFESSOR SHRODER.

Not given in 1970-71.]

STUDY ABROAD

C3991x-C3992y. Supervised Study in France.

Special study under the supervision of the Director of Studies of Reid Hall in Paris. This normally involves work in an individually arranged program of courses given by various branches of the University of Paris, which may include the *Institut des Professeurs a l'Etranger*, the *Institut d'Etudes Politiques*, the *Ecole du Louvre*, and others. Prerequisite: Written permission of the major adviser and the chairmen of both the Barnard and Columbia College French Departments.

C3997x-C3998y. Supervised research.

Normally this course is open only to students in consultation with and under the supervision of the Director of Studies of Reid Hall in Paris and involves individual work with an established specialist in the student's major field. Prerequisite: the same as for C3991x-C3992y.

GEOGRAPHY

PROFESSOR: LEONARD ZOBLER (Chairman; 334 Milbank Hall)

INSTRUCTOR: GARRET A. SMITH, JR.

OFFICERS OF COLUMBIA UNIVERSITY OFFERING COURSES OPEN TO BAR-

NARD STUDENTS

PROFESSOR: WILLIAM A. HANCE

ASSOCIATE PROFESSORS: ROBERT A. LEWIS, KEMPTON WEBB

ASSISTANT PROFESSORS: GUNTHER KRUMME, MICHAEL GREENBERG,

LENORE MACOMBER, JOHN E. OLIVER, IAN R. MANNERS

GEOGRAPHY

The central questions of contemporary geography spring from its total view of the earth as a habitat for man. What are the relations between the locations of the natural features of the earth's surface and man's cultural and economic activities? Can homogeneous regions, large and small, be identified and how do they evolve? Why do cities locate where they do, grow to certain sizes, develop peculiar structures, perform unique functions, and how do they relate to one another and their environs? When are natural resources conducive or restrictive for growth and change and does the role of nature differ in advanced or emerging societies?

In pursuing the answers to these questions, and others, geographers examine the behavior of man-environment spatial systems at different times and places. An understanding of the dynamics of the interactions among man, resources, and space suggests ways for anticipating and ameliorating contemporary environmental problems and planning for the future. Geographers thus are involved deeply in regional and urban planning in both developed and underdeveloped regions.

A knowledge of earth science and social science is an essential part of geographic training. Geography 1, 2, 4, and a year seminar (59, 60) are required. During the seminar a senior essay is prepared, usually based on original field research. The remainder of the major is tailored to the student's interests, which usually are along one of the following paths: natural resources, specialization in a region, as Africa, Latin-America, or Anglo-America, or a substantive field as urban geography, agriculture, manufacturing, location theory or physical geography.

In the place of a major examination each student in the senior seminar (59, 60) will prepare an essay.

ENVIRONMENTAL CONSERVATION AND MANAGEMENT

Conservation is concerned with man's stewardship of the earth as his home and the proper management of its resources. The particulars of this program will be found on p. 52 under Interdepartmental Offerings.

GEOGRAPHY

1, 2. Environmental Science.

The natural environment of man viewed as the fusion of spatially interacting processes, cycles, and forms close to the earth's surface. Environ-

mental modifications and deteriorations caused by pressures of urbanism, technology, and population. Autumn Term: disturbances of natural equilibria induced by human settlement patterns and activities on air, water, soil, landform, open space, biota, and on man himself. Remedial measures and conservation issues. Spring Term: ecosystem analysis of pristine and altered biomes, natural resource-using systems of agroindustrial society and their degenerative feedbacks. Ecologic surveying for town, country, and regional planning for environmental stability. The city as a unique habitat and elements of man-designed environments. Lectures are given jointly with Columbia College. Permission for laboratory assignment required. Professors Manners, Oliver, Zobler. Lec. Tu Th 12. Lab. M 2:10-5, Tu 9-11:50, W 2:10-5, F 2:10-5.

[3. Agricultural Development and Agrarian Societies. PROFESSOR ZOBLER. Not given in 1970-71.]

Ecology of Urban-Industrial Society.

studies. Professor Tu Th 11.

[8] The geographic and technologic correlates of urban-industrial society. The restructuring of an agrarian economy under the impact of the industrializing process. Rural-urban population flows, raw material inputs, manufactural and transport patterns, regional growth and world urbanization, city structure and central place systems, and environmental change viewed as elements in an industrial ecosystem. Metropolitan area planning in developed and emerging nations examined as case

31. Environmental Policy.

Factors influencing the development and implementation of conservation policy. Evolution of environmental programs at local, state, and national levels. Case study examples. Hours to be arranged.

Transportation and Land Use.

A study of the key role played by transportation in the ecology of metropolitan regions and its effect on land use patterns. The private versus public mass transportation conflict and transportation policy and economics. Evolution of land use policy and zoning ordinances. Hours to be arranged.

34. Environmental Planning and Perception.

[13]

Preparation of city, town, and county land use and open space plans. Environmental perception and principles of ecologic land classification for multiple use applied to selected areas and neighborhoods. Th 4:10-6.

W4011x. Pedology and Soil Resources.

Introduction to the biogeochemistry of soils and their genesis, morphology, classification, and agricultural use. The ecology, management, and conservation of soils in selected agrarian systems. Field mapping of soils for farm planning and land development in urbanizing areas. Occasional laboratory exercises and two one-day field trips. Given alternately with W4012x. Professor Zobler. Tu Th 2:10-3.

[W4012x. Hydrology and Water Resources. Not given in 1970-71.] PROFESSOR ZOBLER.

W4013y. Conservation Theory and Environmental Management.

Ecologic factors in conservation theory and the management of natural resources on a single, multiple, or areal basis. The allocation and use of fund, flow, and ambient resources. Man-environment relations in open space and metropolitan area planning. Ecologic survey methods for environmental quality maintenance and pollution control. Three one-day field trips are required. Professor Zobler. Tu Th 2:10-3.

C3002y. Principles of Economic Geography.

A systematic analysis of the distribution of resources, industries and population in relation to physical, economic, technological and other factors. Resource-use planning and the principles of economic location and regional development. Professor Greenberg. M W 11-12:15.

W4018y. Cartography.

The use of maps for illustrative and statistical purposes, as point, line, and area symbols, and for geographic analysis. A survey of photogrammetry and remote sensing and of modern map production methods. Experience in cartographic drafting, compilation, design, and evaluation. Use of aerial photographs in mapping and as map supplements. Lab. fee: \$5. Lec. F 1:10. Lab. F 2:10-4.

[W3101y. Anglo-America.

Not given in 1970-71.]

Professor Greenberg.

[C3200y. Economic Geography of Latin America. Not given in 1970-71.]
PROFESSOR WEBB.

C3040x. Urban Geography.

Recent literature relevant to urban geography, including readings going beyond conventional treatments; examples of field work in cities; a survey of verbal, graphic, and mathematical models used to describe urban phenomena. Professor Macomber. M W F 10.

W3403y. Economic Geography of the U.S.S.R.

The U.S.S.R. in terms of its environment, resources, population, and distribution of economic activity. Particular reference to demographic problems. PROFESSOR LEWIS. M W 2:40-3:55.

[W3500x. African Problems and Potentialities. Not given in 1970-71.]
PROFESSOR HANCE.

W4025x. General Climatology.

Introduction to the physical processes of the atmosphere and their application to studies in regional and applied climatology. Laboratory work: analysis of climatic data. Professor Oliver. Tu 4:10-6.

59, 60. Seminar in Geography.

[0]

Readings, discussions, and reports on various topics from the research literature. Preparation of the senior essay. Required of senior majors. PROFESSOR ZOBLER. Hours to be arranged.

COLUMBIA COURSES

The following graduate courses are offered to qualified students with the permission of the chairman of the Barnard department.

G4201x. Latin America.

G4401x. Economic Geography of the USSR.

G4501x. African Economic Geography.

G4021y. Agricultural Systems.

G4022y. Location Theory.

G4023x. Regional Economic Analysis.

G4030x. Cultural Geography.

G4050x. Population Geography.

G4071x-4072y. Quantitative Methods in Geography.

G4601x. The Middle East.

G4080y. Geographic Thought.

GEOLOGY

PROFESSOR: JOHN E. SANDERS (Chairman; 328B Milbank Hall)

OFFICERS OF COLUMBIA UNIVERSITY OFFERING COURSES OPEN TO BARNARD STUDENTS:

PROFESSORS: ORSON L. ANDERSON, ROGER L. BATTEN, WALLACE S. BROECKER, RHODES W. FAIRBRIDGE, PAUL W. GAST, 1 RALPH J. HOLMES, 1 JOHN E. NAFE

ASSOCIATE PROFESSORS: IAN DALZIEL, JOHN T. F. KUO, HENRY KRUMB, MANIK TALWANI, PETER J. M. YPMA

ASSISTANT PROFESSORS: ARNOLD L. GORDON, JAMES D. HAYS

ADJUNCT PROFESSORS: S. I. RASOOL, URL SHAFRIR

GEOLOGY

Geology deals with the study of the earth, applying various aspects of all modern sciences, especially chemistry, physics, and biology. The central theme of geology involves the many interwoven reactions which constitute the geologic cycle. The geologic cycle results from the effects of solar energy on the earth and on the organisms inhabiting the earth. In addition, the cycle depends on internal energy from the earth itself, which powers various igneous and tectonic processes. Geology is concerned with an understanding of how the operations of the geologic cycle in various environments through time have shaped the earth's surface and have created the geologic record. In the geologic record are preserved a decipherable history of past environments and of the progression, through time, of the populations of organisms that have inhabited the earth. A pressing modern concern of geology deals with the interactions between man's technologic cycle and the natural geologic cycle.

The first year of study may be selected from among three sequences: (1) a broad, general introductory course (W1021x, W1022y), (2) an introductory course emphasizing ocean science (W1031x) and planetary geology (W1032y), or (3) an introductory course emphasizing man's physical environment (W1041x). A year's work satisfactorily completed in any of the sequences fulfills the laboratory science requirement. With permission of the department a student may enter advanced courses in geology after completing one of these sequences.

Students having extensive preparation in mathematics, physics, and chemistry who desire to apply these disciplines to the study of the earth should enroll in W1051x and W1052y.

Major programs include three options: Option A: pre-professional preparation in non-biologic aspects of geology; Option B: pre-professional preparation in biologic aspects of geology; Option C: Earth Science major, including selected fields of study within geology and physical geography. Geologic concentration in problems of the coastal zone is also possible in Barnard's interdepartmental program on Environmental Conservation and Management.

¹ Absent on leave, 1970-71.

Students electing any of the major options will take a sequence of courses which will be worked out in consultation with their major adviser. Majors in geology should plan to spend at least one summer in geologic mapping at an approved geologic field camp, in research activities at an ocean-ographic institution, or as a participant in an approved field research program being carried out elsewhere.

There is no major examination, but a satisfactory research paper prepared in conjunction with a senior seminar is required.

Students contemplating graduate study in geology should plan their programs to include a reading knowledge of two modern foreign languages (German, French or Russian generally), and a year course in chemistry, physics, and mathematics (including calculus for students choosing major Option A, and statistics for major Option B).

ENVIRONMENTAL CONSERVATION AND MANAGEMENT

Conservation is concerned with man's stewardship of the earth as his home and the proper management of its resources. Students in the interdepartmental program in Environmental Conservation and Management who desire to concentrate in coastal studies are required to take as electives Geology W4226y and TK 4802 (Teachers College), and to carry out their research in some coastal project. The core courses and further particulars of the program are found on page 52 under Interdepartmental Offerings.

W1021x. Physical Geology.

The composition and structure of the earth, the internal and external forces acting upon it, and the surface features resulting. Laboratory includes study of common rocks and minerals, of contour maps as means of depicting the earth's morphology, and of geologic maps to infer the subsurface structure of the earth's crust, and two field trips to local geologic features. Professor Sanders and staff. Lec. M W F 10; Lab. (3 hours) M 2:10-5; Tu 9-11:50; 2:10-5; W 2:10-5; Th 9-11:50, 2:10-5.

W1022y. Historical Geology.

The history of the earth and of the life upon it from the beginning to modern times. The laboratory and assigned work include study of invertebrate fossils and of geologic maps and structures, museum trips, short field trips, and a required one-day field trip. A research paper on a geologic topic is due early in May. Prerequisite: W1021x. PROFESSOR SANDERS and staff. Lec. M W F 10. Lab. (3 hours) M 2:10-5; Tu 9-11:50, 2:10-5; W 2:10-5; Th 9-11:50, 2:10-5.

W1031y. Ocean Science.

Interaction of man and the sea. Marine, chemical and biological sciences and their relation to the sea as a food source and as a waste sink. The impact of man on the ocean system. The record of oceanic events in the sediments as a tool for extending Interaction studies over long periods of time. Relationship of oceanic processes to climate and weather. Laboratories will deal with some of the current techniques used in ocean research. Recommended preparation: high school physics, chemistry and mathematics. Professor Hays, Lec. Tu Th 9. Lab.: hours to be arranged.

W1032x. Planetary Geology.

New perspectives on the earth derived from recent observations of the Moon, Mars, Venus, and meteorites. Evolution of the morphologies and atmosphere of these objects. The bearing of new data on some long accepted views of earth history. Comment on the likelihood that intelligent life exists elsewhere in our galaxy. Laboratories will deal with photographic, seismic, chemical and other techniques used for planetary studies. Recommended preparation: some background in high school physics, chemistry and mathematics. Professor Anderson. Lec. Tu Th 9. Lab. hours to be arranged.

W1041x. Man's Physical Environment.

Processes taking place in the earth's lithosphere, hydrosphere and atmosphere which bear on man's attempt to cope with his environment. Topics such as pollution control, weather modification and earthquake prediction will be considered. Lectures deal with global aspects of these problems and laboratories with the urban aspects. Emphasis is placed on the role of the scientist; an attempt is made to integrate the economic, political and sociological implications. Recommended preparation: some background in high school physics, chemistry and mathematics. Professor Broecker. Lec. M W 6:10-7:25. Lab. hours to be arranged.

W1051x. Principles of Geology, I.

Materials, forms, structures and processes that occur at the earth's surface. Development of the earth's surface in time. Geology as a factor in determining man's physical environment. Occasional lectures by research scientists on subjects of current interest. Prerequisite: high school chemistry, physics and mathematics. Corequisite: a term of physics or chemistry. This course is prerequisite for advanced undergraduate geology courses. To be taken together with Geology W1052 in either order, with permission of the instructor. Professor Nafe. Tu Th 4:10.

W1052v. Principles of Geology, II.

Materials, forms, structures and processes that occur within the earth. Endogenetic processes that governed the earth's development in time. Reaction rates and equilibria within the earth's crust. Occasional lectures by research scientists on subjects of current interest. Prerequisite: high school chemistry, physics and mathematics. Corequisite: a term of physics or chemistry. Professor Nafe. Lec. Tu Th 4:10. One 2-hour laboratory-conference period a week and field trips to be arranged.

W3045x. Elements of Structural Geology.

Training in the recognition and interpretation of geologic structures both in the field and on geological and topographical maps. Prerequisite: Course W1051x, W1052y, or permission of the department; W3113x, W4114y. Professor Dalziel. Tu Th 11. Lab. Tu 2:10-5. Field work to be arranged.

W3522y. Exploration Geology and Mining Geophysics, I.

The geological environment of mineral deposits and their structural control. Ore genetical principles as a guide to mineral deposits. Geo-

chemical and geophysical anomalies related to mineral deposits, their detection and interpretation. Prerequisite: W1051, W1052 or W4007. PROFESSORS YPMA and KUO. M W F 10.

[W3902. Introduction to Geophysics.

Given in alternate years; not given in 1970-71.]

PROFESSOR TALWANI.

W4008x and y. Introduction to Atmospheric Science.

Observational data concerning the atmosphere; radiative, convective and turbulent processes; equations of motion of geophysical fluid dynamics; general circulation and thermal structure of the atmosphere; physics and dynamics of clouds; meteorological satellite and new observation systems. Open to seniors majoring in one of the physical sciences. Professors Rasool and Shafrir. M W 9-10:30.

W3113x. Elements of Mineralogy and Crystallography—Nonsilicates and Ore Minerals.

Crystallography, including principles of symmetry, internal structure of crystals, coordination, bonding, and external crystal form. Physical properties, occurrence, mode of origin, and the economic and geologic significance of the ore minerals and the nonsilicates of economic or geologic importance. Application of physical properties and chemical tests in the recognition of minerals. Given in sequence with Geology W4114y. Prerequisite: Geology W1051x, W1052y, and elementary college physics, and chemistry, or permission of the instructor. Professor. Tu Th 11. Lab. Tu 1:10-4.

W4114y. Mineralogy of the Silicates and Rock-Forming Minerals.

Physical properties, occurrence, mode of origin and the more important and other geologic significance of the rock-forming minerals. Application of physical properties and chemical tests in recognition of minerals. Given in sequence with Geology W3113. Prerequisite: W1051x, W1052y, W3113x, elementary physics and chemistry, or permission of the instructor. Professor Tu Th 11. Lab. Tu 1:10-4.

W4120y. Analytical Mineralogic Techniques.

Analytical methods for mineral identification and study, including the polarizing petrographic microscope, the reflecting polarizing microscope, x-ray diffraction (both powder and single crystal methods), x-ray fluorescence, and differential thermal analysis. Prerequisite: Course W3113x and W4114y or equivalent. Professor ______ Tu Th 10. Lab. Th 1:10-3.

W4327x. Principles of Geomorphology.

Lectures, map study, and readings on geomorphic principles. The origin of surface features of the earth as controlled by the interaction between geologic structures and erosional processes. Prerequisite: one year of geology. Professor Fairbridge. M W F 1:10. Lab. W 3:10-5.

W4009x. Chemical Geology, I. Atomic Structures and Physical Properties of Solids.

Atomic theory, bond theory, lattice types, the interaction of electromagnetic waves and solids; x-ray crystallography, crystal chemistry of common oxides, sulfides and rock-forming minerals. Prerequisite: W3113x or its equivalent, or permission of the instructor. Professors Anderson and YPMA. Lec. M W F 11. Lab. M 1:10-2:30.

W4010y. Chemical Geology, II. Fundamental Concepts in Chemical Equilibria and Petrology.

Thermodynamical properties of solids, stable and unstable isotopes, statistical mechanics of geological processes, phase equilibria involving solids and liquids, sulfides, carbonates, and rock-forming minerals. Prerequisite: W4009x or permission of the instructor. Professors Broecker and Lec. M W F 11. Lab. M 1:10-2:30.

W4661x. Introduction to Paleontology.

A systematic survey of the morphology, ecology, taxonomy, and geologic history of groups of invertebrate animals commonly found as fossils. Prerequisite: W1021x and W1022y or permission of the instructor. Professors Batten and Hays. Lec. M W 11. Lab. F 2:10-4.

W4226y. Marine Sedimentology.

Theory and techniques of modern marine sedimentology, including processes associated with deposition and diagenesis. Prerequisite: W3113x, W4114y, W4661x, and one term of college chemistry. Expenses: \$10. Professor Sanders. Lec. W F 1:10. Lab. W 2:10-4.

W4701x. Introduction to Petrology.

The classification and genesis of igneous, sedimentary, and metamorphic rocks. The major rock types will be examined in hand specimens and under the microscope. Prerequisite: W1051x, W1052y and elementary knowledge of physics and chemistry. W F 12. Lab. two hours to be arranged.

W4927x. Introduction to Oceanography.

Properties of sea water; water masses and their distribution; sea-air interaction influence on the ocean structure; basic oceanic circulation pattern; relation of diffusion and advection with respect to distribution of ocean elements; measurement techniques and methods of data processing and analysis. Professors Broecker and Gordon. Lec. & Lab. Tu Th 6:30-8 p.m.

60. Seminar in Geology.

[0]

A seminar course with discussions, problems, and readings on various problems in geology. Prerequisite: a year of geology. Required of senior majors. PROFESSOR SANDERS. Hours to be arranged.

COLUMBIA COURSES

The following courses are open to qualified students with the permission of the Barnard chairman:

W3048v. Introduction to Field Geology.

W4030y. Climatic Change.

W4049x. World Regional Geology.

W4053x. Geology of the New York Region. W4411x. Principles of Structural Geology.

W4941x. Principles of Geophysics. W4883x. Principles of Geochemistry.

W4521x. Exploration Geology and Mining Geophysics.

TK4802 (Teachers College). Coastal Oceanography.

G4226y. Biostratigraphy.

GERMAN

ASSOCIATE PROFESSORS: BRIGITTE L. BRADLEY (Chairman; 320B Milbank Hall), GERTRUD M. SAKRAWA

ASSISTANT PROFESSOR: FREDERICK G. PETERS

INSTRUCTOR: PETER D. G. BROWN

The courses in the German Department are designed to develop proficiency in all the language skills, to present the German cultural and literary tradition in its European context, and to study the works of important German, Austrian, and Swiss writers. The literature courses taught in German are open to all students who have completed German 4, 4x, or the equivalent. For students who do not know German the department offers a series of courses in German literature in English translation.

A student majoring in German will aim at fluency in the language and at a fundamental understanding of the intellectual currents and literary developments in the German speaking countries. In consultation with her major adviser she will plan a program which includes German 5 (or the equivalent) and eight literature courses, one of which to be a seminar. In addition, she may select subjects from other fields in accordance with her own special interests. Students interested in a major in German are urged to consult with the department as early as possible to work out an accelerated language program.

The major examination consists of a three-hour written section (in English) and of an individual oral exam of a half hour (in German). The senior essay (Course 62) will replace the written section.

Students who elect German as part of a combined major will work out their special program in consultation with the departments concerned.

Foreign Language Requirement for the Degree: The completion of German 4 or 4x satisfies the requirement. Students who had prior training in German and who wish to fulfill their foreign language requirement in German will be placed in the appropriate courses on the basis of their CEEB scores or, if such are not available, on the basis of a proficiency test taken before registration. If their CEEB scores or their scores on the proficiency test are sufficiently high, they will be automatically exempted from the requirement. Transfer students should consult with the department.

LANGUAGE COURSES

1-2. Elementary Full-Year Course.

[15]

Elements of grammar, easy reading, written and oral practice. PROFESSORS SAKRAWA and PETERS. Section I M W F 9. Section II M W F 12:10. Required oral sections may be chosen as follows: Section I Tu Th 9. Section II Tu Th 11.

1y. Elementary Full-Year Course. Part I.

Same as Course 1, but given in the Spring Term. Mr. Brown. M Tu
W Th F 9.

2x. Elementary Full-Year Course. Part II.

[1]

Same as Course 2, but given in the Autumn Term. Mr. Brown. M Tu W Th F 9.

3. Intermediate Course.

[15]

Close reading of works by contemporary writers, outside reading assignments, grammar review, practice in speaking and writing. Mr. Brown and Section I M W F 10. Section II M W F 12:10.

3y. Intermediate Course.

141

Same as Course 3, but given in the Spring Term. Professor Peters. M W F 1:10.

4. Literary Appreciation.

[15]

Study of German based on analyses of writings selected for their stylistic complexity and literary excellence. Class discussions. Compositions. PROFESSOR SAKRAWA and Section I M W F 10. Section II M W F 12:10.

4x. Literary Appreciation.

[3]

Same as Course 4, but given in the Autumn Term. PROFESSOR BRADLEY. M W F 11.

5. Advanced Oral German and Composition.

[0]

A variety of short readings as a point of departure for discussions and stylistic exercises. Emphasis on idiomatic usage and syntactical structures to develop fluency in speaking and proficiency in writing. Professor Sakrawa. M W F 11.

7-8. Elementary Reading Course.

[2]

Introduction to the comprehension of expository German. Recognition of structures, basic vocabulary, stylistic traits. Classes conducted in English. The courses may not be used to fulfill the language requirement. Mr. Brown. M W F 10.

LITERATURE COURSES

For nonmajors, courses marked thus § will count toward the general college requirement. All courses are conducted in German except Courses 50, 55, and 56. No prerequisites for courses conducted in English. Prerequisites for courses taught in German: Course 4, 4x, or the equivalent. All examinations are written in English. Non-majors may write their papers in German or English.

§11, 12. Main Currents in German Literature and Culture.

[5]

An introduction to the most significant writers, philosophers, and musicians of the German speaking countries. The interrelation of literary movements, intellectual trends, and historical conditions. Lectures, analyses of representative works, discussions. Autumn Term: 1700 to 1830. Spring Term: 1830 to the present. Professor Bradley. M W F 2:10.

[\$15. Goethe and Schiller.

Not given in 1970-71.]

PROFESSOR SAKRAWA.

§25. German Drama in the Nineteenth Century.

1827. The German Novel from Goethe to Thomas Mann.

A study of the dramatic work of Kleist, Grillparzer, Buchner, Grabbe, and Hebbel. Dramatic theories. Tradition and anticipations of later

Trends in narrative writing. Analysis of works by authors such as Kafka, Boll, Johnson, Frisch, Grass, Lenz, Wolf. Professor Bradley.

dramatic innovations. Professor Peters. Tu Th 10:35-11:50.

[§16. German Romanticism.

PROFESSOR SAKRAWA.

[§26. Modern German Theater.

§28. Modern German Prose Fiction.

PROFESSOR BRADLEY.

PROFESSOR SAKRAWA.

Tu Th 10:35-11:50.

_	. German Poetry in Our Century. PROFESSOR BRADLEY.	Not given in 1970-71.]
	Goethe's Faust. An intensive study of Goethe's Faust, Part SAKRAWA. M W F 11.	I and II. Professor
	German Literature in the Middle Ages. Earliest literary documents and a study of maarme Heinrich, Parzival, Nibelungenlied. Lyricon Walther von der Vogelweide. Professor Brad	poetry with emphasis
	From Humanism to the Age of Enlightenment Humanism in its relation to the Reformation. the context of the Thirty Years War. The literal 18th century with emphasis on Lessing. Profest 1:10.	Baroque literature in ary achievements of the
	Conrad Ferdinand Meyer. Seminar required of all majors. Open to other permission of the instructor. A study of the Swork and poetry. Professor Sakrawa. Tu Th	Swiss writer's narrative
	Senior Essay. Senior essay, based on the work of Course 61 or Regular consultations with the instructor at hou	
	Herman Hesse in Translation. A study and evaluation of Hesse's prose work. A is not required. Mr. Brown. Tu Th 10:35-11:	
	Masterpieces of German Literature in Translati From the Age of Chivalry to the early twentiet works and authors to be read: <i>Parzival</i> , S Schiller, Goethe, Buchner, Thomas Mann. A k	th century. Among the implicissimus, Lessing,

not required. Professor Peters. Tu Th 2:10-3:35.

Not given in 1970-71.]

Not given in 1970-71.]

Not given in 1970-71.]

[7]

56. Modern German Literature in Translation.

[9]

Fiction and plays by authors who have had a decisive impact on our times. Writers to be concentrated on: Kafka, Musil, Grass, Durrenmatt, and others. A knowledge of German is not required. PROFESSOR PETERS. Tu Th 2:10-3:35.

COLUMBIA COLLEGE

C3668y. Modern German Drama.

A survey of modern German drama. Works by Hauptmann, Schnitzler, Wedekind, Kaiser, Sternheim, Brecht, Frisch, and Weiss. Prerequisite: C3333-3334 or permission of the instructor. Professor Voss. M W F 1:10.

C3991y. Symposium on German Prose Literature.

Discussion and analysis of important literary works selected from various periods, emphasizing the *Novelle* and the *Roman*. Prerequisite C3333-3334 or permission of the instructor. PROFESSOR KAHN. M 2:10-4.

GREEK AND LATIN

Professor: Helen H. Bacon¹ (Chairman; 217 Milbank Hall)

ASSOCIATE PROFESSOR: LYDIA H. LENAGHAN (Acting Chairman for Spring 1971: 215 Milbank Hall)

INSTRUCTOR: ANN CORNELL SHEFFIELD

OFFICERS OF COLUMBIA UNIVERSITY OFFERING COURSES OPEN TO BARNARD STUDENTS:

Professors: William M. Calder III, Henry S. Commager, Jr., WALTHER LUDWIG, HOWARD N. PORTER

ASSOCIATE PROFESSORS: COLEMAN H. BENEDICT, JAMES A. COULTER.2 LEONARDO TARAN

ASSISTANT PROFESSORS: PETER POUNCEY, SETH L. SCHEIN, RICHARD STEWART, JOHN VAIO

The general objectives toward which the work of the department is directed are a knowledge of the language, literature, and civilization of the ancient Greeks and Romans. The emphasis varies in accordance with the student's interests.

A major in Greek: Eight courses in Greek above the elementary course. These must include Greek V3319x or V3320y, and Greek V3105x-V3106y. Greek-Latin 61 may be substituted for Greek V3105x.

A major in Latin: Eight courses in Latin above the elementary course. These must include Latin V3319x or V3320y, and Latin V3105x-V3106y. Greek-Latin 61 may be substituted for Latin V3105x.

A major in Greek and Latin combined may be arranged for qualified students on consultation with the major adviser.

Students who complete Greek or Latin V3998x or y with distinction, and whose other work in the major is of sufficiently high quality, will be eligible for the degree with honors.

Other fields: Courses in ancient art, archaeology, history, philosophy, other languages, and linguistics are strongly recommended.

Barnard College participates in the program of the Intercollegiate Center for Classical Studies in Rome. Greek and Latin majors who have completed at least four semesters of Latin above the elementary course, and at least one semester of elementary Greek, are eligible to apply for admission to the program of the Rome Center for one or two semesters, preferably in the junior year. Courses taken at the Rome Center may be counted toward the major and, in some cases, toward the fulfillment of the general requirements. Barnard College is a Supporting Institution of the American School of Classical Studies at Athens and the American Academy in Rome, and certain privileges of those schools are open, without fee, to graduates of the College.

¹ Absent on leave, Spring Term. ² Absent on leave, 1970-71.

GREEK AND LATIN

FOREIGN LANGUAGE REQUIREMENT FOR THE DEGREE: Students may fulfill the foreign language requirement in Greek or Latin either by completing Greek 11, 12 or Latin 3, 4, or one semester above Greek 12 or Latin 4; or by passing an exemption examination with a sufficiently high grade. This examination tests the student's knowledge of grammar and her ability to translate written Greek or Latin.

CLASSICS IN TRANSLATION

[Classical Literature 35. The Ancient Novel. Not given in 1970-71.] PROFESSOR BACON.

Classical Literature 32x. Classical Myth.

[4]

A survey of major myths from the ancient near east to the advent of Christianity, with emphasis upon the content and treatment of myth in classical authors (Homer, Hesiod, Aeschylus, Sophocles, Vergil, Livy, Ovid). Professor Lenaghan. M W F 1:10.

Classical Literature C3123y. Greek Drama and Its Influences.

The major Greek tragedies and comedies, and their influence on Roman and later European drama. Some attention is paid to the problems of the origin of Greek drama, the production of plays, and the dramatic criticism of Aristotle. MISS SHEFFIELD. M W F 10.

Classical Literature C3124x. Roman Literature.

A study, through translations, of the major literary works in the fields of epic, history, oratory, lyric, and elegy, philosophy, and satire. Some attention is given to the historical development of Roman literature. A term paper is required. M W F 10.

Classical Civilization C3155x. Greece.

Greek literature, thought, and political institutions against their historical background. Selected readings, lectures, and discussions. M W F 10.

Classical Civilization C3156y. Rome.

The Roman basis of modern civilization. Administration, law, commerce and communications, religion and philosophy, science, arts, literature, family, and social life. Lectures and discussions, required reading and reports. Professor Stewart. M W F 10.

GREEK LANGUAGE AND LITERATURE

For nonmajors, courses marked thus § will count toward the general college requirement.

1-2. Elementary Full-Year Course.

Grammar, composition, and reading. Course 1 is prerequisite to Course

[§11. Prose and Poetry.

Not given in 1970-71.]

MISS SHEFFIELD.

[§12. Selections from Homer. MISS SHEFFIELD.

Not given in 1970-71.]

§V3305x. Tragedy.

A play of Aeschylus and a play of Sophocles are read; studies in the origin and development of Greek tragedy. Prerequisite: Course 12, or the equivalent. Given every other year in alternation with Course V3307x. Professor Bacon. M W F 1:10.

§V3306y. Historians.

Selections from Thucydides; studies in Greek historical writing. Prerequisite: Course 12, or the equivalent. Given every other year in alternation with Course V3308y. Professor Vaio. Tu Th 6:10-7:25.

[§V3307x. Comedy. Professor Taran.

Not given in 1970-71.]

[§V3308y. Philosophy. Professor Coulter.

Not given in 1970-71.]

§V3309x. Selections from Greek Literature, I.

Plato: Symposium and Phaedrus. Prerequisite: Course 12, or the equivalent. Professor Schein. Tu Th 6:10-7:25.

§V3310y. Selections from Greek Literature, II.

Lyric poets including Sappho, Alcaeus and Pindar. Prerequisite: Course 12, or the equivalent. Professor Porter. M W F 1:10.

[V1109x-V1110y. Prose Composition, I. Professor Pouncey.

Not given in 1970-71.]

V3319x, V3320y. Prose Composition, II.

The writing of sentences and (in the spring term) of connected passages in Greek. An introduction to stylistics. Prerequisite: at least four terms, or the equivalent, of Greek. Professor Vaio. W 2:10-4.

[V3371x-V3372y. Major Seminar. Professor Coulter.

Not given in 1970-71.]

V3998x or y. Supervised Research in Greek Literature.

A program of research in Greek literature, with the composition of a paper embodying results. Prerequisite: permission of the chairman of the department. Members of the Barnard and Columbia Departments. Hours to be arranged.

§V3105x-V3106y. History of Greek Literature.

Lectures based on extensive readings in Greek literature from Homer to the fourth century A.D. Prerequisite: at least two terms of Greek beyond Course 11, 12. V3105x, Professor Calder. M 2:10-4 and a third hour to be arranged. V3106y, Professor Taran. M 2:10-5.

Greek-Latin 61. Comparative Readings in Greek and Latin Literature. [5] Parallel readings in Greek and Latin to illustrate Rome's literary obligation to Greece as well as Rome's efforts at emancipation from

Greece. Students in Greek will read Greek authors in Greek, Roman authors in English, students in Latin will read Roman authors in Latin, Greek authors in English. The two groups will meet separately one hour a week; joint meetings two hours a week. Open to juniors and seniors. Professor Lenaghan, Miss Sheffield. M 2:10 Th 10-11:50.

LATIN LANGUAGE AND LITERATURE

For nonmajors, courses marked thus § will count toward the general college requirement.

1-2. Elementary Full-Year Course.

[3]

Grammar, composition, and reading. Course 1 is prerequisite to Course 2. MISS SHEFFIELD. M W F 11-12:15.

§3. Cicero: Selections.

[5]

§4. Vergil: Selections from the Aeneid.

[5]

Prerequisite: Course 3, or two or three years of high school Latin. Miss Sheffield. M W F 2:10.

§V3012x. Lyric Poetry.

Selections from Catullus and Horace. Prerequisite: Course 4, or four years of high school Latin. Professor Ludwig, Miss Sheffield, Professor Commager. Section I M W 11-12:15 (Columbia students). Section II M W F 1:10 (Barnard students). Section III M W 6:10-7:25 (Columbia students).

Note: Sections I and III are open to Barnard College students with permission of the department chairman.

§V3011y. Myth and Pastoral.

Selections from Livy; Vergil's *Eclogues*. Prerequisite: Course V3012x, or four years of high school Latin. Professor Stewart, Professor Lenaghan. Section I M W F 11 (Columbia students). Section II M W F 1:10 (Barnard students).

Section I is open to Barnard College students with permission of the department chairman.

§Latin 33v. Medieval Literature.

[3]

Representative writings and genres in relation to their classical models. Prerequisite: Permission of the instructor. Professor Lenaghan. M W F 11.

§V3305x. Historians.

Selections from Tacitus; studies in Latin historiography. Prerequisite: Course V3011y, or the equivalent. Given every other year in alternation with Course V3307x. Professor Benedict. M W F 10.

§V3306y. Satire.

Satires of Horace and Juvenal; studies in the history of satire. Prerequisite: Course V3011y, or the equivalent. Given every other year in alternation with Course V3308y. Professor Commager. Tu Th 2:40-3:55.

[§V3307x. Elegiac Poetry. Professor Commager.

Not given in 1970-71.]

[§V3308y. Philosophy. Professor Benedict.

Not given in 1970-71.]

§V3309x. Selections from Latin Literature, I.

The confrontation of the Pagan and the Christian worlds: selected readings from Ambrose, Jerome, Augustine. Prerequisite: Course V3011y, or the equivalent. Professor Lenaghan. M W F 11.

§V3310y. Selections from Latin Literature, II.

Selections from the Roman agricultural authors from Cato to Pliny with some emphasis on the changing economic situation of Roman agriculture. Prerequisite: Course V3011y, or the equivalent. Professor Pouncey. M W 6:10-7:25.

[V1109x-V1110y. Prose Composition, I.

Not given in 1970-71.]

V3319x, V3320y. Prose Composition, II.

The writing of sentences and of connected passages in Latin. An introduction to stylistics. Prerequisite: at least four terms, or the equivalent, of Latin. V3319x, Professor Stewart. Tu 2:10-4. V3320y, Professor Pouncey. W 2:10-4.

[V3371x-V3372y. Major Seminar. Professor Lenaghan.

Not given in 1970-71.]

V3998x or y. Supervised Research in Latin Literature.

A program of research in Latin literature, with the composition of a paper embodying results. Prerequisite: permission of the chairman of the department. Members of the Barnard and Columbia Departments. Hours to be arranged.

§V3105x-V3106y. History of Latin Literature.

Lectures based on extensive readings in Latin literature from the beginning to the fourth century A.D. Prerequisite: at least two terms beyond Course V3012x, V3011y. V3105x, Professor Commager. Th 2:10-4 and a third hour to be arranged. V3106y, Professor Ludwig. Th 2:10-5.

Greek-Latin 61. Comparative Readings in Greek and Latin Literature. [5]

Parallel readings in Greek and Latin to illustrate Rome's literary obligation to Greece as well as Rome's efforts at emancipation from Greece. Students in Greek will read Greek authors in Greek, Roman authors in English; students in Latin will read Roman authors in Latin, Greek authors in English. The two groups will meet separately one hour a week; joint meetings two hours a week. Open to juniors and seniors. Professor Lenaghan, Miss Sheffield. M 2:10 Th 10-11:50.

GREEK AND LATIN

GRADUATE COURSES

Graduate courses given at Columbia University are open with the consent of the department and the major adviser to qualified majors. Their description may be found in the Bulletin of the Graduate School of Arts and Sciences.

MODERN GREEK LANGUAGE AND LITERATURE

[1-2. Elementary Full-Year Course. Not given in 1970-71.]

[3. Modern Creek Literature. Not given in 1970-71.]

[4. Modern Greek Literature. Not given in 1970-71.]

HISTORY

PROFESSORS: BASIL RAUCH (Chairman; 420 Lehman), CHILTON WILLIAMSON

ASSOCIATE PROFESSORS: ANNETTE K. BAXTER, PATRICIA ALBJERG GRAHAM, STEPHEN KOSS, GEORGE WOODBRIDGE

Assistant Professors: Ann Fagan, Daniel Field, Robert Mc-Caughey, Suzanne F. Wemple

LECTURER: PATRICIA H. LABALME

ASSOCIATE: EARL CLEMENS

History, as knowledge of the past, touches all aspects of human experience. Historians' accounts of the past form a branch of literature in which factual statements can be verified in primary sources. History should be studied to improve understanding of man in society—his failures and his achievements—and to acquire a sense of the relevance of the past to the present.

All Barnard history courses (except senior seminars) are open to all Barnard students and to all Columbia College students, including freshmen.

The requirements for a major in history are eleven courses distributed as follows:

- 1. At least four courses in an area of concentration. While history majors usually concentrate on European or American history, they may, upon approval of the chairman, specialize in any field of particular interest, such as classical civilization, Jewish history, Oriental studies, African studies, cultural history, or urban history.
- 2. Five other courses. Of these, two may be taken in other departments provided that such courses are closely related to the student's field of concentration, and provided that she obtains the written permission of her major adviser.
- 3. Two courses of senior seminar in connection with which the student must write a senior essay.

Note: At least two of the above courses must be colloquia, for one of which an introductory seminar may be substituted.

Joint majors: A student who wishes to combine studies in history with studies in some other discipline should draw up a proposal and present it to the chairmen of the departments concerned for advice and approval.

The attention of Barnard students is called to the fact that, besides the offerings of Columbia College presented below (with letter designations), a number of history courses offered in General Studies and the Graduate School of Arts and Sciences are available to them. Students are therefore urged to consult the appropriate bulletins in making out their programs, taking care to acquaint themselves with the conditions for admission to courses other than those listed in the Barnard announcement.

INTRODUCTORY SEMINARS

These are designed primarily for freshmen and sophomores and are also open to upper-classmen. Admission by written permission of the instructor. In the Introductory Seminars students engage in individual and group research projects requiring work in primary as well as secondary sources.

Introductory Seminars.

- I. Permutations of the Reform Impulse in America: From Abolitionism to Radical Reconstruction. Analysis of the personalities, techniques, and problems of those who struggled first to free the slaves and then to help Black people secure a viable place in American society. Professor McCaughey. W 2:10-4.
- II. European Societies at War. A comparative study of the social, economic, and psychological effects of war upon combatant societies. Examples will range from the early Middle Ages to the Second World War. Professors Wemple and Koss. W 2:10-4.

LECTURE COURSES

These are conducted primarily by means of lectures, besides readings, written exercises, and examinations.

V1103x-V1104y. The Beginning of History and the Bronze Age.

V1103: from the appearance of written records in Egypt and Mesopotamia (ca. 3100 B.C.) to the expulsion of the Hyksos from Egypt and the end of the dynasty of Hammurabi in Babylon (ca. 1600 B.C.). V1104: the Egyptian and Hittite empires, the Minoan and Mycenaean cultures, and the rise of Assyria, to 1200 B.C. Instructor to be announced. M W 7:40-8:55 p.m.

V1005x-V1006y. 1200 B.C. to 640 A.D.

V1005: from the invasions of the twelfth century, through the revivals of Greek and Near Eastern culture, to the accession of Alexander the Great. V1006: Alexander; the Hellenistic world; the rise of Rome and the Roman Empire; to the rise of Islam. PROFESSOR SMITH. Tu 6:20-9 p.m.

[C1105x. The Greek World. MR. HARRIS.

Not given in 1970-71.]

[C1106v. The Hellenistic and Roman Worlds. Not given in 1970-71.] MR. HARRIS.

The Early High Middle Ages: from 300 to 1050. 3.

The fusion of Graeco-Roman, Judeo-Christian and Germanic traditions, and the emergence of Europe as a cultural unit. Professor Wemple. Tu Th 10:35-11:50.

The Middle Ages: from 1050 to 1450. 4.

The social environment, political institutions, church history, thought and science from the Gregorian Revolution to the Renaissance. Pro-FESSOR WEMPLE. Tu Th 10:35-11:50.

C3199x-C3200y. The Foundations of Early Modern Europe, 1500-1648.

A survey of European civilization in the sixteenth and early seventeenth centuries. Professor Rice. M W 9.

11. Main Currents of the Modern European World: Renaissance to the French Revolution.

The forces—cultural, social, political, economic—which established modern Europe and brought it into contact with the rest of the world. PROFESSOR WOODBRIDGE. M W F 9.

12. Main Currents of the Modern European World: Waterloo to Today.
[1] and [4]

Nineteenth-century industrial revolutions, romanticism, liberalism, nationalism, socialism, and imperialism and twentieth-century wars, revolutions, dictatorships, and aspirations. Professors Woodbridge and Fagan. Section I M W F 9. Section II W M F 1:10.

- 13y. The Italian Renaissance in the 15th and 16th Centuries. [6]

 The development of city-states, ideals of education, statecraft, the arts, the courtly tradition, and philosophical pursuits in Italy from 1400 to 1534. Dr. Labalme. Tu Th 9:10-10:25.
- [14. The Reformation in Europe in the Sixteenth Century.

 DR. LABALME.

 Not given in 1970-71.]
- C3203x-C3204y. Europe, 1714 to 1870. PROFESSOR BIDDLE. Tu Th 11-12:15.
- 17. An Age of Conflict: Europe from 1815 to 1870. [2]

 The legacy of the French Revolution and the Napoleonic episode; the struggle for constitutional government and for national unity and independence. Professor Woodbridge. M W F 10.
- 18. The Struggle for Mastery: Europe from 1870 to 1914. [2]

 The period of German leadership. The individual states of Europe and their relations. Imperialism and power alignments. The First World War. Professor Woodbridge. M W F 10.
- C3204x-C3206y. The Political Culture of Europe Since 1890.

A historical analysis of European society in the age of democracy, imperialism, and totalitarianism, with particular emphasis on the relation between changes in European society and the political decline of Europe. Professor Stern. Tu Th 2:10-3:25.

- 19. The Problems of Europe: 1914-1939.

 The First World War and the ensuing settlements; the apparent liquidation of the war; the League; new political systems; and the collapse of the thirties. Professor Fagan. M W F 11.
- 20. The Second World War and the Recovery of Europe: 1939 to Today.

 [3]
 The Second World War and its legacy; the United Nations; rival groups and the Cold War; the new place of Europe in the world. ProFESSOR FAGAN. M W F 11.

V1003x-V1004y. History of Science.

The development of the major scientific ideas within the history of civilization, from classical antiquity to the present day. Emphasis is on the crucial stages in the history of science rather than on a detailed survey. Either term may be taken separately. Professor Graham. MW 1:10-2:25.

21. England under the Tudors and Stuarts: 1485 to 1714. [9]

England's national monarchy from its establishment through its evolution by parliamentary agitation and civil war. Special attention to the effects of religious thought upon political development. Professor Koss. Tu Th 2:10-3:25.

22. Modern Britain: 1714 to Today.

[9]

The transformation from squirearchy to meritocracy, with an emphasis upon the rise of industrialism, its effects upon Britain's domestic and international situations, and the development of the welfare state. Professor Koss. Tu Th 2:10-3:25.

G6327x. The British Empire.

A survey of major developments from Tudor times to the American War of Independence. The emphasis will be placed upon the imperial factor in relation to Ireland, Asia, West Africa, the British West Indies. Professor Williamson. M W F 11.

G6328y. The British Empire-Commonwealth.

Major themes will consist of reform, expansion, anti-imperialism, the New Imperialism and the emergence of the Commonwealth since 1914. PROFESSOR WILLIAMSON. M W F 11.

[25. The Establishment and Downfall of the French Monarchy: 1515 to 1789.

Not given in 1970-71.]

PROFESSOR WOODBRIDGE.

[26. France in Turmoil: 1789 to Today. Professor Woodbridge.

Not given in 1970-71.]

27. The Russian State and Society: Origins and Development, to 1801. [9] State institutions and social structure in medieval and early modern Russia; the Kievan and Muscovite background and Imperial Russia from Peter the Great to the end of the eighteenth century. Professor FIELD. Tu Th 10:35-11:50.

28. The Modernization of Russia: 1801 to Today.

[9]

The last century of Imperial Russia, the Revolution, and the development of the Soviet Union. Instructor to be announced. Tu Th 2:10-3:25.

51. A Survey of American Civilization to the Civil War.

[2]

A discussion of the major intellectual concerns of the English colonists; the political and ideological process by which they came to see themselves as Americans; the social and economic forces that helped to shape this distinctive identity; the conflicting pressures that brought violent disruption in 1861. Professor McCaughey. M W F 10.

52. A Survey of American Civilization Since the Civil War.

[2]

A discussion of the intellectual and social accommodations made by Americans in the face of industrialization and urbanization; certain patterns of political and economic thought discernible in the Progressive era, the Twenties, the Depression, and the contemporary predicament. Professor McCaughey. M W F 10.

C3121x-C3122y. The United States in the Nineteenth Century, 1815-1877.

Political and social developments in the nineteenth century, including such subjects as Jacksonian Democracy, slavery and the Old South, abolitionism, the causes of the Civil War, the Civil War and emancipation, and Reconstruction. Professor Foner. Tu Th 11-12:15.

C3137x-C3138y. The United States, 1877-1929.
PROFESSOR STERNSTEIN. M W 11-12:15.

[53. American Colonial Culture. Professor Williamson.

Not given in 1970-71.]

[54. The American Revolution. PROFESSOR WILLIAMSON.

Not given in 1970-71.]

C3123x-C3124y. American Urban History.

A historical analysis of the structure, character and influence of American cities in the growth of the nation, from the colonial era to the present. Problems considered include urban imperialism, urban reform, bossism, tenements, the settlement house movement, architecture, city planning, urban renewal, the origins of the ghetto, and racial violence. Professor Jackson. Tu Th 11-12:15.

- [55. From the Federal Constitution to Jacksonian Democracy.
 PROFESSOR WILLIAMSON. Not given in 1970-71.]
- [56. Sectionalism, Civil War, and Reconstruction. Not given in 1970-71.]
 PROFESSOR WILLIAMSON.
- 57. Origins of Modern America: From Reconstruction to the First World War.

 [3]
 Radical reconstructionism and its legacy of failure; the resort to Social Darwinism; racism and imperialism of the 1890's; the Progressives' response to the twentieth century. Professor McCaughey, M W F 11.
- 58. Radicalism, Reform, and Reaction in Modern America: 1913 to Today.

 [9]

 The formation of the Welfare State from Woodrow Wilson to Richard

The formation of the Welfare State from Woodrow Wilson to Richard M. Nixon as a conservative compromise between radical and reactionary attacks upon "the American Way." Professor Rauch. Tu 2:10-4.

- [59. The Classical Age of American Diplomacy: 1775-1823.

 PROFESSOR RAUCH.

 Not given in 1970-71.]
- [60. American Diplomacy and Power: 1823 to Today.

 PROFESSOR RAUCH.

 Not given in 1970-71.]

- 63. Problems in the Teaching of History.

 The selection and organization of content for junior and senior high school history courses; use of primary sources, secondary readings, and other relevant materials; problems of evaluation. Primarily for students in the Education Program; others by written permission of the instructor. Mr. Clemens. M 4:10-6.
- 64. (Religion 64.) The History of Religion in America. [5]
 Religious thought and institutions from colonial times to the present;
 their influence on American political and social history through the
 work of representative individuals. Professor Snook. M W F 2:10.
- 65. History of Education in the United States.

 The development of American education in the context of social and intellectual history. Professor Graham. M 2:10-4.
- V3127x-V3128y. History of Africa.

History of the African continent from the earliest times to the present. V3127: to 1800. V3128: 1800 to 1960. Professor Irwin. M W 11-12:15.

Oriental Civilizations V3355x-V3356y. Introduction to the History and Culture of Oriental Societies.

For description, see Columbia College Bulletin.

COLLOQUIA

These are conducted by means of group discussion, readings, and short written reports. Admission requires the written permission of the instructor. Columbia College colloquia in history are open only to junior and senior history majors.

- 5. The Roots of the Modern World: Western Europe, 1230-1494. [0] The disintegration of medieval unity; national and dynastic states; papal absolutism and conciliarism; urban democracy and dictatorship; capitalism and social unrest; economic pressures and explorations; humanism and mysticism. Professor Wemple. Tu 3:35-5:25.
- [8. The Transformation of the Roman World: From Diocletian to Charlemagne. Not given in 1970-71.]
 PROFESSOR WEMPLE.
- V3577x-V3578y. Topics on Greek and Roman History. Instructor to be announced. Hours to be arranged.
- V3775x-V3776y. Medieval and Renaissance History. Professor Somerville. Th 2:10-4.
- 10. Erasmus and the Humanist Predicament. [0]
 The life and times of Erasmus of Rotterdam (1469-1536), his learning and wit, his debate with Luther, his friendships, his disciples, and the moral issues of his day. Dr. LABALME. Tu 3:35-5:25.
- 33. The Great Historians.

 Readings from selected classics in European historiography, among them the works of Thucydides, Gibbon, Macaulay, and Namier, with special attention to the development of scholarly inquiry and technique. Professors Wemple and Koss. Th 3:35-5:25.

[35. The French Revolution. Professor Woodbridge.

Not given in 1970-71.]

C3845x-C3846y. Modern European Historiography.

Schools of historical writing and speculations on history; the classic European historians and their controversies. Professor Francos. Th 2:10-4.

C3813x. The History of Spain.

Selected topics of the period since the close of the Middle Ages. Stress will be laid on the examination of economic and social institutions. Professor Noel. Hours to be arranged.

C3815x-C3816y. The Emergence and Development of the Modern State. Comparative history of Britain, France, Germany, Russia, and the United States, from 1760 to the present, with emphasis on the relations between political practice and political theory. Professor Krieger. M 2:10-4.

C3817y. Bourgeois Society and Its Critics in the Nineteenth Century.

Bourgeois society, its solidity and deficiencies, as seen through the writings of its great detractors, from Rousseau through Thomas Mann. Various texts, principally philosophers and novelists. Professor STERN. W 7:30-9:30 p.m.

45y. The Life and Lifetime of Sir Winston Churchill.

[0] Events in English and world history from 1874 to 1965, reflected in the writings, experiences, and career of the statesman whose lifetime and controversies spanned nine decades. Professor Koss. Th 3:35-

Europe in the Age of Tyrannies; 1914-1945. Not given in 1970-71. Professor Koss.

C3843x-C3844y. The Coming of the Two World Wars.

European politics, culture, and society and the coming of the two World Wars. Professor Kimmich. Tu 2:10-4.

47. Appeasement: Its Strategy and Morality.

[0]

The development of British policy towards Hitler's Germany, with emphasis upon the domestic, European, and global factors that influenced British decisions. Professor Fagan. M 2:10-4.

48. Modern Imperialism: Myth and Reality.

[0]

An examination of the broad spectrum of literature dealing with the imperial experience in Europe and America. Professor Williamson. Tu 3:35-5:25.

55. Jacksonian America.

5:25.

[0]

Society, culture, and politics in the Jacksonian era: a study in changing historical interpretation. Professor Williamson. Tu 3:35-5:25.

C3937x-C3938y. Readings in Early American Party Development, from 1780 to 1840.

Professor Hofstadter. W 4:10-6.

C3925x-C3926y. Re	eadings in	American	Radical	History.
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Readings and research in aspects of American protest movements. PROFESSOR SHENTON. W 4:10-6.

C3923x-C3924y. The Civil War and Reconstruction, from 1840 to 1877.

Readings and research in the social, economic, political, and military affairs of the United States during and after the Civil War. PROFESSOR KERBY. Th 4:10-6.

71. American Colleges in Crisis.

[0]

The intellectual, economic, and institutional pressures upon American colleges and universities. Professor McCaughey. M 2:10-4.

72. American Urban History.

[0]

An examination of topics relating to the responses of American intellectuals to urbanization, particularly efforts to define and defend an urban style. Professor McCaughey. M 2:10-4.

73. Women in America.

[0]

An examination of important historical and literary sources for the study of American women from colonial times to the present. Professor Baxter. Tu 2:10-4.

74. Critics of Modern America: 1865 to Today.

[0]

Major vehicles of cultural criticism ranging from the utopian novel and muckraking journalism to the polemical essay and the expatriate confessional. Professor Baxter. Tu 2:10-4.

[75. Franklin D. Roosevelt and the New Deal. Professor Rauch.

Not given in 1970-71.]

[76. Franklin D. Roosevelt and Foreign Affairs. Not given in 1970-71.]
PROFESSOR RAUCH.

C3939x-C3940y. The College and University in American Society.

An examination of institutions of higher learning from the point of view of their historic impact on American social mobility, economic growth, political action, race and ethnic relationships, intellectual life and cultural values. Professor Metzger. Hours to be arranged.

C3903x-C3904y. The American Presidency.

Readings and research in selected problems of the institution. Professor Graff. W 10-11:50.

SENIOR SEMINARS

Students conduct individual research programs and embody the results in their Senior Essays. Open to senior history majors; others may be admitted by written permission of the instructor.

91-92. Senior Seminars in European Civilization.

[0]

Students will conduct individual research, in consultation with the instructor, on subjects in European thought and society of particular

interest to themselves. The results of each project will be presented in seminar discussion in the form of the senior essay. Professors Fagan, Wemple and Woodbridge. Section I W 4:10-6. Section II W 4:10-6.

93-94. Senior Seminar in American Civilization.

[0]

Individual research on diverse aspects of American history and presentation of results in seminar discussion in the form of the senior essay. PROFESSOR WILLIAMSON. Th 4:10-6.

GRADUATE COURSES

Certain graduate courses given in the University are open to qualified majors with the consent of the department and the major adviser. These courses are described in the Bulletin of the Graduate School of Arts and Sciences.

- G4156x-G4157y. The European Lefts since 1830. PROFESSOR PAXTON. Tu 10-11:50.
- G4177x. Europe since Munich.
 PROFESSOR MASTNY. M 4:10-6.
- G4636y. Intellectual Currents in Modern Jewry. Professor Hertzberg. Th 10-11:50.
- G4293x-G4294y. English Constitutional History. PROFESSOR BEAN. Tu Th 1:10.
- G4379x. Russian and Soviet Scientific Thought. Professor Graham. M 10-11:50.
- G4170x-G4171y. The History of Modern Italy, 1815-1945. PROFESSOR PERNICONE. W 11-12:50.
- G4428y. History of the Hapsburg Monarchy, 1815-1918. PROFESSOR HANAK. Hours to be arranged.
- G4179y. German National Socialism, 1919-1945. PROFESSOR MASTNY. M 4:10-6.
- G4665x-G4666y. The Era of the American Revolution, 1754-1798. PROFESSOR MORRIS. M W 11.
- G4697x-G4698y. History of the Foreign Relations of the United States. Professor Graff. W 2:10-4.
- G4693x-G4694y. American Economic History. PROFESSOR BRUCHEY. Tu Th 4:10-5.
- G4779x-G4780y. History of Latin American Civilization. PROFESSOR KLEIN. M W 11.
- G4784y. The History of Modern Brazil.
 INSTRUCTOR TO BE ANNOUNCED. Th 2:10-4.
- G4787y. Latin American Independence Movements, 1789-1830. PROFESSOR WEATHERHEAD. Tu 10-11:50.

- G4913x-G4914y. History of West Africa. PROFESSOR IRWIN. Tu 2:10-4.
- G4919x. Religious Influences in Modern African History. PROFESSOR WRIGHT. F 9-10:50.
- G4920y. Colonialism in Eastern Africa. Professor Wright. F 9-10:50.
- G4851x-G4852y. The Modern History of Southeast Asia. Professor Roff. Th 2:10-4.
- G4525x-G4526y. History of Modern India and Pakistan. PROFESSOR GORDON. M W 10.

ITALIAN

PROFESSOR: MARISTELLA DE PANIZZA LORCH

(Chairman for Barnard College, 206 Milbank, and Acting

Departmental Representative for Columbia College, 503 Cosa Italiana)

INSTRUCTORS: ENNIO RAO, RINALDINA RUSSELL, P. NICO SOLINAS

ASSISTANT: LINDA YELLEN

OFFICERS OF COLUMBIA UNIVERSITY OFFERING COURSES OPEN TO BARNARD STUDENTS:

PROFESSORS: JOHN C. NELSON, OLGA RAGUSA, LUCIANO REBAY!

ASSOCIATE PROFESSOR: ROBERT HANNING

INSTRUCTORS: JON CHERUBINI, ALBERTA FABRIS GRUBE

LECTURER: IRVING PORTNER

A major in Italian is expected to attain (a) sufficient knowledge of the language to enable her to read, write and speak it, (b) a fundamental acquaintance with Italian literature, (c) ability to understand and interpret literary texts in Italian.

Courses: A minimum of ten courses, exclusive of language courses, to be planned as early as possible in consultation with the department; Course V3991x-V3992y.

Allied subjects: In consultation with their major adviser students should select courses in other languages and literatures, music, art history, philosophy, and religion.

The major examination consists of four hours of written work and an oral examination.

Foreign Language Requirement for the Degrees: All new students who intend to satisfy the foreign language requirement in Italian must take a placement examination before registration. This examination tests the student's knowledge of grammar, her ability to comprehend written and spoken Italian, and her ability in free composition. Students receiving a sufficiently high grade will automatically fulfill the requirement. All others may do so by completing a full-year literature course, given in Italian, or Course V3333x with a minimum grade of B+.

Casa Italiana: The Casa Italiana, located on Amsterdam Avenue at 117th Street, is open to all students interested in Italian culture and literature. A program of films, lectures, concerts, plays, poetry recitations, and informal gatherings is organized to meet the students' needs.

LANGUAGE COURSES

V1101x-V1102y. Elementary Full-Year Course.

An integral course for beginners with intensive oral-aural drill. Reading, translation, conversation. May not be taken simultaneously with

¹ Absent on leave, 1970-71.

Spanish 1-2. No credit is given for Course V1101x until Course V1102y has been completed. Work in the language laboratory for one hour weekly is a required part of the course. Section I M Tu W Th F 9 (Dr. Solinas). Section II M W F 12 and Tu Th 11 (Dr. Grube).

V1201x-V1202y. Intermediate Course.

A review of the essentials of grammar; intensive and extensive reading, particularly from contemporary authors; translation, composition, and practice in conversation. In the second semester special attention will be given to literature, art, social customs of Sicily from the thirteenth century to the present. Prerequisite: V1101x-V1102y or the equivalent. Mr. Rao. M Tu W F 10.

V1301x-V1302y. Comprehensive Elementary and Intermediate Course.

For linguistically gifted students who wish to acquire by intensive study the reading skill necessary to interpret Italian literary texts. Section I M W F 11-12:15 (Dr. RUSSELL). Section II M W F 4:10-5:25 (Dr. SOLINAS).

With the permission of the chairman of the department, this course may be applied toward the fulfillment of the language requirement, provided it is followed by a one-year course in Italian literature.

V3113x-V3114y. Introduction to the Reading and Analysis of Italian Literature.

Open primarily to graduate students in other departments as a cognate course to their field of specialization. Qualified juniors and seniors may be admitted with permission of the instructor. A previous knowledge of Italian is not required.

V3113x. The basic structure of the language, with emphasis on building vocabulary through progressively difficult readings.

V3114y. Reading and analysis of selected classics of Italian literature by such authors as Dante, Petrarca, Boccaccio, Machiavelli, Manzoni, Verga, and Pirandello. Mr. Portner. Tu Th 4:10-5:25.

LITERATURE COURSES IN ITALIAN

For non-majors, courses marked thus § will count toward the general college requirement. All courses are conducted in Italian.

§V3333x-V3334y. Introduction to Italian Literature.

History of Italian literature from Dante through the twentieth century; oral and written reports.

V3333x. Major literary works up to the seventeenth century. V3334y. From Marino to the moderns. Prerequisite: V1202y or the equivalent. Dr. Grube. M W 4:10-5:25.

§V3335x-V3336y. Italian Written and Oral Style.

Written and oral self-expression in Italian; brief papers and translations and oral reports on a variety of topics; grammar review. Prerequisite: V1201x-V1202y or the equivalent.

V3335x. Dr. Solinas. Tu Th 2:40-3:55. V3336y. Mr. Cherubini. Tu Th 2:40-3:55.

§V3449x-V3450y. Contemporary Italian Literature.

The late nineteenth-century background and twentieth-century developments in poetry, drama, and the novel. Reading of representative works. Lectures; oral and written reports. Prerequisite: V1201x-V1202y or the equivalent.

V3449x. Instructor to be announced. M W 6:10-7:25. V3450y. Mr. Cherubini. M W 6:10-7:25.

§V3535x. Dante.

Readings from the *Divine Comedy* and the minor works. Lectures, discussions, and reports. Prerequisite: Three years of college Italian or a sufficient mastery of the language to satisfy the instructor. Mr. Portner. M W 1:10-2:25.

§V3536y. Petrarch and Boccaccio.

Readings from the Canzoniere, the Decameron, and other works. Lectures, discussions, and reports. Prerequisite: Three years of college Italian or a sufficient mastery of the language to satisfy the instructor. Mr. Portner. M W 1:10-2:25.

[§V3537x. Poliziano, Lorenzoil Magnifico, Pulci, Machiavelli.

Dr. Grube. Not given in 1970-71.]

[§V3538y. Boiardo, Ariosto, Castiglione. Dr. Grube.

Not given in 1970-71.]

[§V3639x-V3640v. Italian Literature from 1550 to 1800.

Not given in 1970-71.]

§V3991x-V3992y. Masterpieces of Italian Literature.

Required of majors. Open to other qualified students by permission of the chairman of the department. Intensive analysis of literary masterworks leading to the preparation of a critical essay. Dr. Grube. M W 2:40-3:55.

COURSES GIVEN IN ENGLISH

Students majoring in Italian may take these courses only with the permission of the chairman of the department.

V1122y. Studies in the Italian Renaissance.

How Renaissance man saw himself and his world. The image of man in literature (Valla, Poliziano, Lorenzo, Leonardo, Ariosto, Castiglione, Tasso, Michelangelo). Aspects of his world: the city and the villa; the myth of the Golden Age and the discovery of space (Petrarca, Boccaccio; Bruni, Palmieri; Leonardo, Ariosto, Galileo). PROFESSOR LORCH. Tu Th 2:10-3:25.

[History-Italian V1131x. Dante's World. Professors Lorch and Wemple.

Not given in 1970-71.]

- [History-Italian V1132y. Petrarch and the Roots of the Modern World.

 Not given in 1970-71.]
- [V1133x. Petrarch and Petrarchism. Not given in 1970-71.]
 PROFESSOR LORCH.
- [V1134y. Studies in Medieval Romance Literature. Not given in 1970-71.] PROFESSOR NELSON.
- V3642y. Studies in Contemporary Italian Arts: The Italian Film.

An "image" of man today through film. Analysis of ethical, social, and aesthetic issues in neorealistic and post-neorealistic Italian film (Visconti, Rossellini, Fellini, Antonioni, Germi, Pasolini). Only excerpts of films are examined in class. Complete films are viewed on M or Tu at 5:30 or 8:30. Laboratory fee \$2. Professor Lorch and Miss Yellen. Tu 2:10-4 and 4:10-5 (discussion).

[English-Italian C3050y. The Renaissance Epic. Not given in 1970-71.]
PROFESSORS HANNING and LORCH.

GRADUATE COURSES

Certain graduate courses given at Columbia University are open to qualified majors with the consent of the chairman of the department. A description of these courses will be found in the Bulletin of the Graduate School of Arts and Sciences.

Comparative Literature—Italian G4725x. Pirandello and the Modern Theatre.

Professor Ragusa. M 5:10-7.

LINGUISTICS

ASSISTANT PROFESSOR: JOSEPH L. MALONE (Chairman, 412A Milbank Hall)

OFFICERS OF COLUMBIA UNIVERSITY GIVING INSTRUCTION TO BARNARD STUDENTS:

PROFESSOR: ROBERT AUSTERLITZ

ASSISTANT PROFESSOR: SIGRID VALFELLS

The purpose of the study of linguistics is to develop understanding of the nature of language. The major is designed to provide the student with a broad appreciation of the fundamental problems of language analysis, some training in the techniques of linguistic research, as well as insight into the interrelations of linguistics with the other social and communicational sciences, the humanities, and philosophy and mathematics.

The student majoring in linguistics must (I) successfully complete Linguistics 21, 22, V3203x, V3206y, either V3301x or V3303x, and 60; and (II) satisfy a program of language and related requirements to be worked out on an individual basis with the major adviser.

The student majoring in linguistics is also encouraged to take courses in old forms of language (e.g. English 53, French 31, Greek or Latin 1-2), history or philosophy or psychology of language (e.g. English 90, French 14, Philosophy 85, Psychology 20), and anthropological linguistics (e.g. Anthropology-Linguistics V3034y).

21, 22. Introduction to Linguistics.

The nature of language. Characteristics of phonological and grammati-

cal systems and of the lexicon. Evolution of language. Role of linguistics in related disciplines. Modern techniques of linguistic analysis. Linguistics 21 is prerequisite to Linguistics 22. Professor Malone. M W F 2:10.

V3203x. Synchronic Linguistics.

Varied approaches to problems in synchronic linguistics, selected to emphasize critical points in linguistic theory. Prerequisite: Linguistics 21, 22, or Linguistics C3101x, C3102y. Professor Valfells. M W F 11.

Historical Linguistics. V3206y.

The principles of both historical and comparative linguistics, with some consideration of the role of philology. Prerequisite: Linguistics 21, 22, or Linguistics C3101x, C3102y. Professor Valfells. M W F 11.

[V3301x. The Structure of a Language.

Not given in 1970-71.]

V3303x. Linguistic Analysis.

Detailed examination of a linguistic problem chosen by the instructor. The morphophonology of the Roumanian verb and noun. No previous knowledge of Roumanian is required, but some knowledge of another Romance language is recommended. Prerequisite: Linguistics 21, 22 or Linguistics C3101x, C3102y. Professor Austerlitz. Tu Th 2-3.

60. Seminar in Linguistics.

[0]

Supervised research in the student's language of specialization; preparation of a term paper. There will also be lectures on modern advances in linguistic theory, especially as relevant to other areas of science and philosophy. Prerequisite: the linguistics major, and senior standing. Professor Malone. M F 10.

Anthropology-Linguistics V3034y. Language and Culture.

Language in its social setting. Social and geographical dialects; covert classificatory systems; ethnotaxonomy; men's and women's speech; baby talk; taboos and euphemisms; secret languages and linguistic play. Prerequisite: One year of introductory linguistics or anthropology. Professor Haas. Tu Th 11-12:30.

MATHEMATICS

PROFESSOR: PATRICK X. GALLAGHER (Chairman; 506 Altschul)

ASSISTANT PROFESSOR: BRIAN O'BYRNE

INSTRUCTOR: RANDALL RUSTIN

OFFICERS OF COLUMBIA UNIVERSITY GIVING INSTRUCTION TO BARNARD STUDENTS:

PROFESSORS: HYMAN BASS, LIPMAN BERS, SAMUEL EILENBERG, ELLIS KOLCHIN

Assistant Professors: Armand Brumer, C. Herbert Clemens, Donald Knutson, John Miller, Jack J. Morava, Reto Ruedy, Jack Shamash, Norman J. Weiss.

RITT INSTRUCTORS: JOHN H. COZZENS, CHRISTOPHER J. HENRICH, THOMAS F. JAMBOIS, ANDY MAGID, BRET R. TILSON, JOHN ROBERT ZUMBRUNN.

Students taking only one year of mathematics ordinarily take Courses 7, 8 or Calculus IA, IIA, the latter being preferred if the mathematics is to be used in science courses. Calculus is offered in three sequences, designated A, B, and C. Students with above-average ability, or with a sustained interest in mathematics, particularly prospective mathematics majors, are expected to take the B or C sequence. These courses are, moreover, usually preferable to skipping a term of calculus when a student's background makes this choice possible.

An advanced placement score of 4 or 5 earns admission to the freshman section of IIIB, and advanced placement credit equivalent to one course, which is increased to two courses upon successful completion in the freshman year of IC-IIC or IIIB-IVB. A score of 3 earns admission to IIIA or IIB. Students who have had a course in differential calculus (but have not had a thorough grounding in integration) may take IIB.

A major in mathematics: Eight courses (exclusive of 7, 8) are required. These must include the following: Calculus I-IV (in the B or C sequence, if possible); W3161x, W3162y, at least two from among 31, 40, W3040x, W3041y. At least six of the required courses should be completed by the junior year. Graduate courses and courses in allied fields, such as statistics, physics, applied mathematics, history of science, etc., are often taken. Majors planning graduate study are advised to obtain a reading knowledge of two of the three languages: French, German, Russian.

The major examination, in the senior year, consists of the Undergraduate Record Examination.

7¹, 8¹. Mathematical Analysis.

Designed to give the student who intends to take only one year of college mathematics as broad a view as possible of the nature of mathematics. Autumn Term: Trigonometry and algebra. Spring Term: Topics

¹ Courses may not be counted toward a major in mathematics.

in analytic geometry, differential and integral calculus. This course is primarily for those who do not plan to major in mathematics or a physical science. Course 7 is prerequisite to Course 8. Professor O'Byrne. M W F 10.

C1101x, C1102y. Calculus IA and IIA.

The differential and integral calculus of functions of one variable, with applications to geometry and physics. Derivatives, integrals, fundamental theorem of calculus. Rational, radical, and elementary transcendental functions. Applications to motion, length, area, volume, energy, radioactive decay, vibration. Vector-valued functions, functions of several variables. Taylor's theorem. Prerequisite: trigonometry. Professors Kolchin, Knutson, Gallagher and Miller. M W F 11. Recitation sections: Tu or Th, 8 or 12.

C1103x, C1104y. Calculus IB and IIB.

The same material as Course IA, IIA, with greater emphasis on the understanding of the mathematical concepts and logical structure. Professors Clemens and O'Byrne. M W F 11. Recitation sections: Tu or Th, 8 or 12.

C1104x, C1203y. Calculus IIB and IIIB.

Prerequisite: A course in differential calculus. Dr. Tilson. M W F 11. Recitation sections: Tu or Th, 8 or 12.

C1107x, C1108y. Calculus IC and IIC.

The same material as Course IA, IIA. The terminology and style are thoroughly modern. Intended for students who have facility with discussions on an abstract level, or who appear likely to develop such facility early. Admission is by examination, given by the Columbia mathematics department during Freshman Week. PROFESSOR MORAVA. M W F 11.

C1201x, C1202y. Calculus IIIA and IVA.

Calculus of functions of several variables, with applications to geometry and physics. Analytic geometry using vector language. Multiple integrals, line integrals, Green's theorem. Techniques of integration. Infinite series. Prerequisite: Calculus II for IIIA, III for IVA. Professor Ruedy and Staff. Tu Th 11-12:15. Recitation sections: M or W, 8 or 12.

C1203x, C1204y. Calculus IIIB and IVB.

The same material as Calculus IIIA, IVA, with greater emphasis on the understanding of the mathematical concepts and the logical structure. Prerequisites: Calculus IIB or the equivalent for IIIB, Calculus IIIB for IVB.

Section I. Professor Bers. Tu Th 11-12:15. Recitation sections: M or W, 8 or 12. Section II. Professor Eilenberg. M W F 11. Recitation sections: Tu or Th, 8 or 12 (freshman section).

C1204x. Calculus IVB.

Prerequisite: Calculus IIIB. Professor Shamash. Tu Th 11-12:15. Recitation sections: M or W, 8 or 12.

C1207x, C1208y. Calculus IIIC and IVC.

The material of Calculus IIIA, IVA, plus additional topics, as time permits. The terminology and style are thoroughly modern. Prerequisites: Calculus IIC for IIIC, Calculus IIIC for IVC. PROFESSOR BASS. Tu Th 11-12:15.

31. Number Theory.

[6]

Congruences, quadratic residues, Gaussian sums. Number-theoretic functions. Distribution of primes. Irrational, algebraic and transcendental numbers. Prerequisite: Calculus II. Dr. Magid. Tu Th 9:10-10:25.

40. Group Theory.

[6]

Sets and maps. Groups, subgroups, factor groups. Actions of groups on sets. Sylow's theorem. Symmetry groups of geometric figures. Prerequisite: Calculus III. Dr. Magid. Tu Th 9:10-10:25.

65. Introduction to Computer Science.

[17]

A first or fundamental course in the study of algorithms and their implementation on the digital computer. Languages to be taught are: Fortran and either Snobol or PL-1. Lab. Section I for non-science majors: Emphasis will be on non-numerical algorithms as found in problems arising in linguistics, translator design, artificial intelligence, pattern recognition etc. Lab. Section II for science majors: Emphasis will be on numerical methods of use in scientific applications such as quadrature, numerical solutions of differential equations, root finding, etc. Mr. Rustin. M W 4:10-5:25. Lab. sections will be arranged.

66. Computer Systems and Coding.

[17]

Fundamentals of machine languages, macro-assemblers, operating systems and machine organization; basically, the anatomy of a digital computer system. Students will develop skill in assembler language coding and apply this in the construction of a nontrivial programming system. Mr. Rustin. M W 4:10-5:25. Lab. one additional hour.

W3005x, W3006y. Advanced Calculus for Science Majors.

Completion of the basic calculus sequence with the essential ground-work for applications to physics and engineering. Autumn Term: Power series in several variables, differentiation of maps, implicit function theorem, change of variables in multiple integration, Green's and Stokes' Theorem. Vector notation is used. Spring Term: Uniform convergence, differentiation of series and integrals. Riemann-Stieltjes integrals, Fourier series, Legendre polynomials, Bessel functions, orthogonality. Terms may be taken in either order. Prerequisite: Calculus IV. Dr. Zumbrunn. Tu Th 1:10-2:25.

W3007x. Complex Variables.

An elementary course in functions of a complex variable. Complex numbers, analytic functions, Cauchy-Riemann equations. Cauchy integral theorem, Taylor and Laurent series, poles and essential singularities, conformal mapping. Professor Clemens. M W 1:10-2:25.

W3010x. Fundamental Concepts of Mathematics.

The groundwork on which almost all modern mathematics rests. Sets, mappings, relations, ordered sets, well-ordering, natural numbers, car-

dinal numbers, ordinal numbers, choice functions, Zorn's lemma, induction, real and complex numbers. Prerequisite: Calculus IV and at least one 3000 course. Dr. Jambois. M W 4:10-5:25.

W3027x (or W3027y). Differential Equations.

The solution of ordinary differential equations, principally by formal methods. Applications to geometry and physics. Prerequisite: Calculus IV or equivalent. Autumn Term: Dr. Henrich. Tu Th 6:10-7:25. Spring Term: Professor Clemens. M W F 10.

W3028y. Partial Differential Equations.

The solution of partial differential equations, with applications to problems in geometry and mechanics. Prerequisite: Course W3027x or equivalent. Dr. Henrich. Tu Th 6:10-7:25.

W3040x, W3041y. Introduction to Modern Algebra.

Introduction to groups, rings, fields, with examples. Polynomials, algebraic number fields, the Galois theory and applications. Prerequisite: Calculus IV or consent of instructor. PROFESSOR KNUTSON. M W 2:40-3:55.

W3161x, W3162y. Introduction to Modern Analysis.

Topics include: Metric spaces and their completion, topological spaces and the theory of continuous functions and convergence, inverse mapping theorems and existence theorems for differential equations, differential forms and their integrals, Fourier transforms. Prerequisite: Calculus IV or the equivalent. Professor Weiss. Tu Th 1:10-2:25.

W3202x (or W3202y). Linear Algebra.

Vector spaces, linear transformations, matrices, quadratic forms. Prerequisite: Calculus II or the equivalent. Autumn Term: PROFESSOR BRUMER. Tu Th 6:10-7-25. Spring Term: Dr. Cozzens. Tu Th 10, W 12.

W3375x. Geometric Topology.

Elementary combinatorial properties of polyhedra. The fundamental group; elementary homology theory and related invariants. Topology of surfaces and their classification. Prerequisite: Calculus IV or consent of instructor. Dr. Cozzens. Tu Th 4:10-5:25.

W3386y. Differential Geometry.

Local and global differential geometry of submanifolds of Euclidean 3-space. Frenet formulas for curves. Various types of curvatures for curves and surfaces and their relations. The Gauss-Bonnet theorem. Prerequisite: Calculus IV or equivalent. Professor Brumer. Tu Th 4:10-5:25.

W3940x, W3941y. Seminar in Algebra.

Discussion and readings of selected topics in algebra. Prerequisite: Course W3041. Professor Shamash. M W 2:40-3:55.

W3961x, W3962y. Seminar in Analysis.

Discussion and readings of selected topics in analysis. Prerequisite: Course W3162. Professor Morava. M W 1:10-2:25.

Mathematical Statistics G4105x. Probability.

Fundamentals; random variables and distribution functions in one or more dimensions; the binomial, normal, and Poisson distributions; combinatorial problems; moments and characteristic functions; stochastic convergence and the law of large numbers; addition of random variables and limit theorems; the chi-square, t, and F distributions. Prerequisite: Calculus IV. M W 5:40-6:55.

Mathematical Statistics G4107y. Statistical Inference.

GRADUATE COURSES

Students are urged to consult the Bulletin of the Graduate School of Arts and Sciences for further information.

MUSIC

Professor: Hubert Doris (Chairman; 703 Dodge Hall)

ASSISTANT PROFESSOR: PATRICIA CARPENTER

INSTRUCTOR: KENNETH COOPER, GORDANA LAZAREVICH

ASSOCIATE IN MUSIC: DANIEL PAGET

ASSISTANT: PETER SCHUBERT

OFFICERS OF COLUMBIA UNIVERSITY OFFERING COURSES OPEN TO BARNARD STUDENTS:

PROFESSORS: JACK BEESON, PAUL H. LANG, HOWARD SHANET

Associate Professors: Chou Wen-Chung, Joel Newman, Ernest H. Sanders

ASSISTANT PROFESSORS: BENJAMIN BORETZ, CHARLES DODGE, JOEL SACHS, HARVEY SOLLBERGER, PIERO WEISS, CHARLES WUORINEN

ASSOCIATE: WALTER SORELL

INSTRUCTORS: GEORGE FLYNN, WALTER HILSE

LECTURER: CHRISTOPHER HATCH

TEACHING STAFF IN APPLIED MUSIC:

(Director to be announced), University Band

HOWARD SHANET, University Orchestra

M. SEARLE WRIGHT, Chapel Choir

DANIEL PAGET, Barnard-Columbia Chorus

A major in music is designed to integrate music as an art and a craft within the framework of the liberal arts.

A student intending to major in music should start with Courses V2100x and V3123x as early as possible. Course 1-2, though a prerequisite for more advanced literature courses, is not required of music majors, since they cover the same type of material in greater depth in the courses already required of them.

In general, major programs are planned to include nine courses of advanced work in literature, history, and theory. Courses V2100-V2101, V2103-V2104, V2105-V2106, V3123-V3124, V3125-V3126, V3179-V3180 and V3373-V3374 are required. (Course V3239x-V3240y is required of students intending to specialize in composition.) Applied music (a maximum of one course) may be counted toward the degree but is not required.

Other fields: A reading knowledge of German, Italian, or French is required. Students planning to do graduate work in musicology, or ethnomusicology, must know at least two foreign languages, including German and French. Courses in art history, history, philosophy, literature, and foreign languages are recommended for their relationship with musical studies, and should be elected after consultation with the department.

Students are advised to consult the Bulletin of the Graduate School of Arts and Sciences for those courses open to seniors and others with advanced training.

At the end of the sophomore year students planning to major in music will be expected to file with the department certificates stating that they have passed an examination in elementary piano. A student found deficient in piano techniques is required to take supplementary piano lessons. If she is unable to pay for such lessons herself, she may apply to the college for financial aid. As with other applied music activities, these lessons will carry the equivalent of one quarter academic credit per semester.

Majors must have participated for two years in the chorus, orchestra, choir, concert band, collegium musicum, chamber music, or other musical ensembles by the time they are graduated.

Students majoring in music are required to take a major examination at the end of the senior year which will test their ability to deal primarily with problems in music history, theory, and analysis.

Practice rooms: The department provides practice rooms at a nominal charge. Preference in assigning hours is given in order of application to music majors and those enrolled in courses given by the department. Application for practice time should be made at the Office of Buildings and Grounds, Milbank Hall: during registration and the first week of classes by music majors, and by all others during the week following.

Library: Books, scores and records are available at the Barnard College Library. The Columbia University Music Library contains an extensive collection of music materials for reference, research, and circulation. In addition, phonographs with a large collection of recordings are also available for use by students registered in music courses other than Course 1-2.

LITERATURE AND HISTORY

1-2. An Introduction to Music.

A study of the elements of musical structure designed to form intelligent listening habits, and of the several great epochs of music, with emphasis on their style and structure. No previous knowledge of music is required. This course is not designed for students majoring in music. Mr. Cooper, Miss Lazarevich, and Mr. Paget. Section I M W F 11. [3] Section II M W F 12. [12] Section III M W F 1:10. [4] One hour per week of supervised listening, chosen from the following: W 4:10, Th 3:10, F 2:10.

V1004y. Literature of the Pianoforte.

A survey of pianoforte literature from the eighteenth century to the present. Prerequisite: Course 1-2 or the equivalent. Professor Sachs. M W 2:10, F 2:10-4. One hour is a listening hour.

V1005x. The Opera.

A rapid survey of the development of opera from Monteverdi to the present. Prerequisite: Course 1-2 or the equivalent. Professor Beeson. M W 1:10-3. One hour is a listening hour.

V1006y. The Symphony.

A survey of symphonic style and structure from about 1750 to the present. Prerequisite: Course 1-2 or the equivalent. Professor Weiss. M W 3:10-5. One hour is a listening hour.

V1007y. Music of the World's Peoples.

An introduction to musical practices of the world, excluding the tradition of Euroamerican classical music. Professor Katz. M W 1:10-3. One hour is a listening hour.

V1008x. Contemporary Music.

A survey of contemporary music from Debussy to the present. Prerequisite: Course 1-2 or the equivalent. Professor Wuorinen. Tu Th 1:10-3.

V1109x, V1110y. History of Dance.

A survey of the development, history, aesthetics, and philosophy of dance, with particular reference to drama, opera, ballet, and modern dance. Lectures and demonstrations; interviews with specialists in the field and practice in selected dance movements. Prerequisite: Permission of the instructor. Registration limited to 40 students. Mrs. Roosevelt and Mr. Sorell. Tu 7:10-9:50 p.m.

V1015y. American Music.

A survey of music in America from Colonial times through the 1950's. Attention is given to the interrelationships among folk, "entertainment," and art music. Prerequisite: Course 1-2 or equivalent. Professor Newman. Tu Th 2:10-4. One hour is a listening hour.

V1617y. Electronic Music: Its Evolution and Techniques.

A comprehensive survey of electronic music from 1948 to 1968, with detailed analysis of compositional techniques and their evolution and application by various groups and individual composers. Technical procedures employed in creating electronic sound materials will also be discussed. Prerequisite: Courses 1-2, V2101 and permission of the instructor. Registration limited to 25 students. Instructor to be announced. Tu Th 7:10-8:25.

V3021y. Schoenberg.

The music and writings of Arnold Schoenberg in light of his role as conservator and innovator. Representative works of Schoenberg will be studied, with especial emphasis on his place within the tradition of classic tonal music and his crucial importance to the music of the twentieth century. Prerequisite: Theory III-IV, or permission of the instructor. Professor Carpenter. F 3:10-5.

[V3042. Aesthetic Disciplines in Music.

Not given in 1970-1971.]

PROFESSOR CARPENTER.

V3123x. History I.

Western music to the early sixteenth century. Prerequisite: Music V2100 or the equivalent. Section I Professor Newman. M W 3:10-5. One hour is a listening hour. Section II Professor Sanders. M W 7:10-8:55. One hour is a listening hour.

V3124y. History II.

Western music from the early sixteenth to the end of the seventeenth century. Prerequisite: Music V3123 or the equivalent. Section I Professor Newman. M W 3:10-5. One hour is a listening hour. Section II Professor Sanders. M W 7:10-8:55. One hour is a listening hour.

Music V3125x. History III.

Western music from the end of the seventeenth century to the early nineteenth century. Prerequisite: Music V3124 or permission of the instructor. Professor Weiss. M W 3:10 and F 3:10-5. One hour is a listening hour.

Music V3126y. History IV.

Western music from the early nineteenth century to the mid-twentieth century. Prerequisite: Music V3125 or permission of the instructor. Professor Weiss. M W 2:10 and F 2:10-4. One hour is a listening hour.

V3179x-V3180y. Seminar. Historical and Analytical Studies in the Literature of Music.

Required seminar for senior majors to supplement and coordinate previous studies. Section I Professor Doris. Th 3:10-5. Section II Professor Carpenter. W 3:10-5.

THEORY

V1329x, y. Musicianship.

The basic elements of music are studied with the aim of developing musicianship. Special attention is given to individual student needs. MISS LAZAREVICH and Mr. FLYNN. Tu Th 4:10-5:25.

Music V2100x. Theory I.

Principles of counterpoint; species counterpoint. Examination of relevant music, especially that of the sixteenth century, is included. Prerequisite: a grade of B in Music V1329 or an equivalent examination given by the department, and a placement examination given on September 21, at 10 a.m., in 710 Dodge. Professors Carpenter and Dodge and Miss Lazarevich. M W F 1:10. Laboratory hours: M W 2:10.

Music V2101y. Theory II.

Triadic harmony. Examination of eighteenth- and early nineteenth-century music is included. Prerequisite: Music V2100 or the equivalent. Professors Carpenter and Dodge and Miss Lazarevich. M W F 1:10. Laboratory hours: M W 2:10.

Music V2110x-V2111y. Principles of Counterpoint and Harmony.

Principles of counterpoint and harmony for students who do not plan to elect more advanced courses in theory. Prerequisite: placement examination given on Monday, September 21, at 10 a.m., in 710 Dodge. Mr. Paget. M W F 11. Laboratory hours: M W 12.

Music V2300x-V2301y. Theory III and IV.

Contrapuntal practices of the eighteenth century, including double counterpoint, canon, and fugue. Harmonic practices of the later nine-

teenth and early twentieth centuries. Examination of relevant music will be included. Prerequisite: Music V2101 or equivalent. Professors Boretz and Dodge. M W F 10.

- [Music V2303. Theory V. Not given in 1970-1971; to be given in 1971-1972.]
- [Music V2305. Theory VI. Not given in 1970-1971; to be given in 1971-1972.]

V3535y. Advanced Keyboard Techniques.

The study of sight-reading, advanced score-reading and figured bass improvisation at the piano as applied to the literature of music. Prerequisite: Course V2101 or the equivalent, the ability to play the piano, and permission of the instructor. Registration limited to 12 students. Mr. Cooper. First meeting Wed. Feb. 3, 3:10. Hours to be arranged.

V3536x. The History of Performance Practice.

A study of how music was performed at various times and how this factor influenced the composition of music and the appearance of scores. Open to all undergraduates. Prerequisite: Permission of the instructor. Mr. Cooper. M W F 3:10.

V3239x-V3240y. Composition.

Composition in the smaller forms, for voice, chorus, piano, organ, and pieces for violin or other instruments with piano. Prerequisite: Course V2301 or written permission of the instructor. PROFESSOR WUORINEN. M 5:10-7.

V3241x-V3242y. Advanced Composition.

A continuation of Music V3239x-V3240y. Prerequisite: Course V3239x-V3240y or permission of the instructor. Professor Wuorinen. W 4:10-6.

V3373x-V3374y. Orchestration, Conducting, and Score-Reading.

Lectures and practice in orchestration and score-reading, supplemented by practical demonstrations of instruments. Prerequisite: Course V2101 or the equivalent and written permission of the instructor. Professor Shanet and Mr. Hilse. M W F 11.

PERFORMANCE ACTIVITIES (APPLIED MUSIC)

A detailed description of the following activities is given in the Barnard Student Handbook.

Academic credit, granted by petition at end of the semester, amounting to one quarter of a course per semester is given for participation in the following activities, with the exception of Music for an Hour.

Audition and rehearsal schedules for all activities will be posted outside the Columbia departmental office, at least a week before registration.

University Orchestra: Professor Shanet.

Auditions: During registration week by appointment. Room 703 Dodge.

Rehearsals: M 5:30-7:30 on the stage of McMillin Theatre, and M W F 5:30-7:30 in the three weeks preceding each concert.

Chapel Choir: MR. WRIGHT.

Auditions: Friday, September 18, from 2 to 5; Monday-Wednesday,

September 21-23 from 10 to 12 and 2 to 5, in the Chapel

Crypt.

Rehearsals: MWF 5-6:15.

Barnard-Columbia Chorus: Mr. PAGET.

Auditions: During registration week by appointment. Room 703

Dodge.

Rehearsals: M W 7:30-9:30 p.m. in Room 304 Barnard Hall.

University Bands: Director to be announced.

Auditions: Concert Band, during registration week and by appointment.

Rehearsals: Tu Th 4-6.

Collegium Musicum.

This organization acquaints the student with certain neglected and unfamiliar masterpieces of vocal and instrumental music not heard in concerts elsewhere. Music majors are particularly urged to attend the meetings and to participate in performances.

Music for an Hour.

This series of informal chamber concerts, held the last Tuesday in every month in the James Room of Barnard Hall, is designed to give all interested instrumentalists a chance to perform for the University community. All those interested in participating should consult the department.

Chamber Music. MR. COOPER.

Groups for informal performance will be formed at the beginning of the year.

ORIENTAL STUDIES

ASSOCIATE PROFESSOR: JOHN MESKILL (Department Representative; 321A Milbank Hall)

ASSISTANT PROFESSOR: BARBARA STOLER MILLER

OFFICERS OF COLUMBIA UNIVERSITY GIVING INSTRUCTION JOINTLY TO BARNARD and COLUMBIA STUDENTS:

PROFESSORS: WM. THEODORE DE BARY, IVAN MORRIS

ADJUNCT PROFESSOR: ARTHUR S. LALL

ASSOCIATE PROFESSORS: H. PAUL VARLEY, BURTON WATSON, HERSCHEL F. WEBB

ADJUNCT ASSOCIATE PROFESSOR: PHILIP B. YAMPOLSKY

ASSISTANT PROFESSORS: FRANK BALDWIN, LEONARD GORDON, WILLIAM HANAWAY, JEANETTE WAKIN

LECTURER: DORIS SRINIVASAN

PRECEPTORS: FRANKLIN DOERINGER, ROBERT GIMELLO, ROYALL TYLER, FREDERICK UNDERWOOD, JACK VAN HORN

Oriental Studies aims to provide, by means of the first three courses listed below, an introduction to major aspects of four living Asian civilizations. These courses are designed for any student, whatever her major, who wishes to include knowledge of Asia in her education.

Majors in the program will be prepared for further study in graduate school or some other related professional training. They will concentrate on one of the following regions or countries: the Middle East, India, China, or Japan.

I. The Middle East.

- (a) As a prerequisite, to be completed by the end of the sophomore year, Oriental Civilizations V3001x-V3002y.
- (b) Four to six courses of Arabic, Persian, or Turkish; details to be explained by the adviser.
- (c) Four additional courses on the Middle East, to be chosen in consultation with the adviser.
- (d) One course in supervised readings, to be arranged in consultation with the adviser.

II. India, China, or Japan.

- (a) As a prerequisite, to be completed by the end of the sophomore year, Oriental Civilizations V3355x-V3356y.
- (b) Four to six courses of an appropriate Oriental language; details to be explained by the adviser.
- (c) Two courses on India, China, or Japan in one discipline.

- (d) Two more courses above the introductory level in the same discipline as chosen under subsection (c), for training in the discipline; to be chosen in consultation with the adviser.
- (e) Two courses in senior seminar, or one course in readings and one in senior seminar, or one course in senior seminar and Oriental Humanities V3399x-V3400y.

Majors in the program come under the administration of the Committee on Foreign Area Studies. For admissions procedures and other details, see page 50.

Oriental Civilizations V3355x-V3356y.

The more important factors in the life of peoples of India, China, and Japan, together with an appraisal of their role in the world today. Autumn Term: The evolution of these civilizations to recent times, emphasizing their characteristic institutions and intellectual traditions. Spring Term: Developments in the nineteenth and twentieth centuries as these societies have confronted the modern West while still grappling with age-old problems. Fourth hour: Lectures and audio-visual illustrations. Prerequisite: one course in history or permission of the instructor. Professors Baldwin, de Bary, Gordon, Lall, Meskill, Miller, Varley, and Webb, Messrs. Doeringer, Gimello, and Mrs. Srinivasan. Section I M W F 9. Section II M W F 10. Section III M W F 11. Section III M W F 11. Section III M W F 12:10 Fourth hour W 12.

Oriental Humanities V3399x-V3400y.

A selection from the works of Near Eastern, Indian, Chinese, and Japanese authors. This course will be conducted as a colloquium and will be devoted to readings in translation and discussion of major works in the literature, philosophy and religion of several Oriental traditions. The Autumn Term will deal with works from the Near East and India; the Spring Term with readings from China and Japan. Open to juniors and seniors who have completed two courses of literature and one course of philosophy or religion, or have written permission of the instructor. Professors De Bary, Hanaway, Meskill, Miller, Morris, Wakin, and Yampolsky, and Messrs. Doeringer, Tyler, Underwood, and Van Horn.

Section I Tu 3:10-5. Section II W 2:10-4. Section III Th 3:10-5. Section IV Th 7:10-9 p.m. Section V F 1:10-3. Section VI M 2:10-4. Section VII Tu 7:10-9 p.m.

Oriental Civilizations V3001x-V3002y. Introduction to Islamic Civilization.

Autumn Term: An examination of Islamic civilization. Its institutional and intellectual characteristics to A.D. 1800. Spring Term: Important factors, such as the impact of the West and nationalism, on the Islamic peoples from 1800 to the present. Professor Hanaway. M W 3:10-4:25.

Oriental Studies V3379x. Readings in Oriental Studies.

Colloquium on major problems of Asian civilizations. Focus in 1970-71, China in later imperial and modern times. Ideals and practices of government; education and the responsibility of intellectuals; the causes

and character of rebellions. Prerequisite: Oriental Civilizations V3355x-V3356y. Professor Meskill. W 3:10-5.

Oriental Studies V3402y. Indian Literature in Translation.

The art of the storyteller. Traditional and modern Indian narrative literature will be used as a medium to introduce the student to various aspects of Indian culture. Special emphasis will be given to the forms of myth, folktale, epic, romance, and fable in relation to the development of the novel in India. Open to all except freshmen. Professor Miller. M 11-12, W 11-1.

History G4525x-G4526y. History of Modern India.

The development of modern India from the decline of the Mughal Empire to the present time. Special attention will be given to the impact of the West, the rise of nationalism, the social, political and economic problems of independent India, and foreign relations. Permission of the instructor required. Professor Gordon. M W 10.

Chinese History G6815x, G6816y. Introduction to the Civilization of China.

An examination of Chinese history from ancient times to the beginning of the seventeenth century, with special attention given to characteristic political, economic and social developments. Permission of Professor Meskill required. Professor Bielenstein. M W 11.

Oriental Studies V3501x-V3502y. Seminar in Asian Literature.

Autumn Term: Selected themes of Chinese, Japanese, and Indian poetry. Spring Term: Selected topics in the contemporary literature of China, Japan, India, and the Near East. Open to juniors and seniors with the permission of Professor Meskill or Miller. Professors Miller and Watson. F 2:10-4.

Oriental Studies V3507x, V3508y. Seminar on Comparative Studies in Asian Civilizations.

Autumn Term: Concepts of Asia in European and Asian social and historical thought. Spring Term: Studies in the modernization of the traditional societies of China, Japan, and India. Permission of Professor Meskill or Varley required. Professors Varley and Gordon and Mr. Doeringer. W 2:10-4.

Students interested in Oriental Studies may want to consider the following course:

Political Science 24. Asian Political Systems.

PROFESSOR DALTON. Tu Th 10:35-11:50.

The following courses in Columbia University are open to majors who have the consent of their advisers and Professor Meskill, Officer in charge of Foreign Area Studies. Descriptions may be found in the Bulletins of Columbia College, the Graduate School of Arts and Sciences, and the School of General Studies.

Anthropology G4187x. Problems of South Asian Ethnology.

PROFESSOR KLASS. W 1:10-3.

- Arabic F1101x-F1102y. Elementary Arabic.
 PROFESSOR MADINA. M 6:40-7:55 p.m. Th 6:10-7:25 p.m.
- Chinese C1101x-C1102y. Elementary Chinese.

 MRS. CHANG SOBELMAN. Section I M Tu W Th F 9. Section IIa

 M Tu W Th F 10. Section III M Tu W Th F 11.
- Chinese C1201x-C1202y. Intermediate Chinese. Mr. Yeu. M Tu W Th F 10.
- Chinese G4005x-G4006y. Advanced Chinese.

 MR. Lo and MISS PAN. Section I M W 11-12:50. Section II M W Th 5:40-7:05.
- Chinese G4031x, G4032y. Chinese Literature.
 PROFESSORS WATSON and HSIA. Tu Th 10.
- Chinese G4033y. Contemporary Chinese Literature. PROFESSOR HSIA. Tu Th 11.
- Chinese-History G6825x, G6826y. History of Modern China. Professor Wilbur. W 2:10-4.
- [Chinese G6027x-G6028y. Introduction to Chinese Thought.
 PROFESSOR DE BARY. Not given in 1970-71.]
- History-Japanese G6840y. Japan in the Twentieth Century. PROFESSOR TIEDEMANN. W 2:10-4.
- History-Japanese G6832x. Early Japan. PROFESSOR MORRIS. Tu Th 11.
- Japanese C1101x-C1102y. Elementary Japanese. Professor Ryan. M W F 11-12:25.
- Japanese C1201x-C1202y. Intermediate Japanese. Mrs. Ch'en. M Tu W Th F 9.
- Japanese W4005x-W4006y. Advanced Japanese.

 PROFESSOR SHIRATO and MRS. CH'EN. Section I M W F 11-12:25. Section II M W F 6:10-7:35.
- Japanese G4031x, G4032y. Japanese Literature.
 PROFESSORS KEENE and SAUNDERS. Tu Th 10.
- Japanese G6027-G6028y. Introduction to Japanese Thought. PROFESSOR DE BARY. M 2:10-4.
- Persian G4602y. Introduction to Persian Literature. PROFESSOR YAR-SHATER. Tu 2:10-4.
- Sanskrit G4101x-G4102y. Elementary Sanskrit. Professor Schwartz.
- Sanskrit G6101x-G6102y. Sanskrit II. PROFESSOR MILLER. M W F 10.

PHILOSOPHY

PROFESSORS: JOSEPH GERARD BRENNAN, MARY MOTHERSILL¹ (Chairman; 326D Milbank Hall)

ASSOCIATE PROFESSOR: SUE HOWARD LARSON

ASSISTANT PROFESSOR: ROBERT E. McGINN, ONORA SYLVIA NELL

The major in philosophy is designed to develop competence in techniques of conceptual analysis and to acquaint the student with the major areas for investigation in traditional and contemporary philosophic theory.

Within the limits of the prerequisities described below, philosophy courses may be taken in any sequence: the numbers assigned to particular courses indicate roughly the level of competence expected of students. (Transfer students who wish to count courses taken elsewhere as prerequisites for Barnard courses must have written permission from the Chairman of the Philosophy Department and may be required to take a placement test.)

A student who majors in philosophy is required to take the following courses or their equivalents: 1, 5, 8, 35, 36, and in the senior year, the seminar, 87-88. Qualified senior majors are permitted to enroll in philosophy courses offered by the Graduate School of Arts and Sciences of Columbia University. Permission for such enrollment should be obtained from the chairman of the Barnard department.

1x (or 1y). Introduction to Philosophy.

Interpretation and analysis of major topics in ethics, metaphysics, theory of knowledge. Readings from historical and contemporary sources. PROFESSORS BRENNAN, MOTHERSILL, LARSON, McGINN, and NELL. Section I M W F 9 (fall term only). [1] Section II M W F 10. [2] Section III M W F 11. [3] Section IV Tu Th 10:35-11:50. [7] Section V M W F 12:10. [12]

2x (or 2y). First-Year Seminar.

[9]

Intensive study of recent philosophical literature on a topic to be selected by the instructor. The aim of the course is to acquaint students with current philosophical methods and sources and to provide experience in writing and discussion. Several short papers and one long paper will be required. Open to a limited number of students upon completion of Course 1 and departmental recommendation. Autumn Term: Professor McGinn. Spring Term: Instructor to be announced. Tu Th 2:10-3:25.

5. Logic I.

[4]

Presented as a formal science, logic will be distinguished from the methodology of the empirical sciences. Analysis of the formal elements of classical logic will be followed by an introduction to symbolic logic. Professor Brennan. M W F 1:10.

¹ Absent on leave, Spring Term.

8. Ethics. [6]

An introduction to the central problems of moral philosophy. Among the topics covered are: action and reasons for action; pleasure and pain; obligation, rights and duties; alternative moral ideals; the use of moral language. Prerequisite: Course 1 or permission of the instructor. Professor Nell. Tu Th 9:10-10:25.

32. Logic II. [9]

An introduction to symbolic logic through quantification theory. Explication of concepts such as the following: sentence interpretation; truth; consequence; validity; consistency; tautology; derivation. Prerequisite: Course 5 or permission of the instructor. Professor McGinn. Tu Th 2:10-3:25.

35, 36. History of Philosophy.

[2]

Autumn Term: Ancient and medieval philosophy. Spring Term: Modern philosophy. Prerequisite: Course 1 or 5 or permission of the instructor. Either term may be taken separately. Professor Nell. MW F 10.

38. Twentieth Century Philosophy.

[5]

A study of contemporary issues in analytic philosophy and continental phenomenology. Readings include selections from Moore, Russell, Wittgenstein, Stevenson, Austin, Meinong, Husserl, Merleau-Ponty and Sartre. Professor McGinn. M W F 2:10.

39, 40. Supplementary Readings in Philosophy.

[0]

To be taken only with the consent of the instructor and permission of the department.

41. Aesthetics. [6]

Systematic consideration of problems in anesthetics and philosophy of art including: the nature of aesthetic concepts; visual form and representation; expression; aesthetic functions of language; the possibility of resolving conflicts of taste. Prerequisite: Course 1 or permission of the instructor. Professor Mothersill. Tu Th 9:10-10:25.

43, 44. Philosophical Implications of the Modern Novel.

Autumn Term: Reading of Schopenhauer's The World as Will and Idea and three works of Nietzsche, followed by a study of Thomas Mann's The Magic Mountain, accompanied by a reading of other Mann works. Herman Hesse's novels are discussed with particular attention to Steppenwolf and The Glass Bead Game. Spring Term: The Flaubert-Joyce theory of art and the artist is compared to the views of Tolstoy and Henry James. The relation of Bergson's philosophy to the work of Gide and Proust is examined, and certain novels of the French "Mandarins" are read. A small number of twentieth-century English and American novels will be read with reference to implicit ideologies and world views. Either term may be taken separately. Not open to freshmen. Professor Brennan. M W F 11.

[47. Philosophy of Science

Not given in 1970-71.]

Professor McGinn.

75. Social Philosophy.

[5]

Problems of contemporary social thought and theory. Among the topics covered are: ideology, alienation, violence, cultural revolution, obscenity, prestige, aggression. Readings include selections from Proudhon, Marx, Nietzsche, Sorel, Keniston, Sontag and Storr. Prerequisite: Course 1, 5, 8 or permission of the instructor. Professor McGinn. MW F 2:10.

77. Theory of Knowledge.

[7]

A general account of the concepts of belief, knowledge, evidence, judgment and error. Readings from contemporary and classical sources. Prerequisite: Course 1, 5 or permission of the instructor. Professor Larson. Tu Th 10:35-11:50.

82. Metaphysics.

[4]

Systematic consideration of problems related to some fundamental metaphysical distinctions, including substance-attribute, particular-universal, mind-body, necessity, contingency and causality. Readings in contemporary and classical philosophy. Prerequisite: Course 1 or the equivalent. Professor Larson. M W F 1:10.

84. Philosophy of Education.

[4]

Classical readings include Plato's Republic and Rousseau's Emile. The idea of individualism, in both its European and American forms, is traced from Rousseau to Dewey, leading to discussion of problems in present day American educational ideology. Selected readings are assigned concerning ideas of "middle class" and black education. Discussion of theories of higher education is supported by readings from Newman's The Idea of a University as well as some related to recent events in American universities. Professor Brennan. M W F 1:10.

85. Philosophy of Language.

[5]

A systematic consideration of such problems as: the possibility of giving a general characterization of language, the relation of syntactic and semantic systems to natural languages, intentional and causal theories of meaning, analysis of speech acts. Prerequisite: Course 1 or 5 or permission of the instructor. Professor Larson. M W F 2:10.

87-88. Senior Seminar.

[0]

An intensive study of selected philosophical classics. Discussion, oral reports and term papers. Required of all majors in their senior year. Autumn Term: Professor Nell. W 3:10-5. Spring Term: Professor Larson. W 3:10-5. Conference hours to be arranged.

PHYSICAL EDUCATION

ASSISTANT PROFESSOR: MARION R. PHILIPS¹ (Chairman; 209 Barnard Hall)

ASSOCIATES: SANDRA GENTER, EDITH G. MASON, JEANETTE S. ROOSEVELT

INSTRUCTORS: ALICE BRAUNWARTH, GAY DELANGHE, BARBARA FITTS, LINDA LERNER

PART-TIME: JANET SOARES

The program is organized and administered by the Department of Physical Education in cooperation with the Medical Department and the Recreation and Athletic Association. It is designed to provide the students with knowledge, skills, habits, and attitudes concerning health, physical activity, and recreation.

The Faculty requires the completion of six semesters of physical education from the time of admission as freshmen, four semesters from the time of admission as sophomores, and two semesters from the time of admission as juniors. Students are not recommended for the degree if they fail to fulfill this requirement.

Medical examinations and posture analysis: Two complete medical examinations by the College Physician are required of all students during the four years. One complete posture examination is given by the Department of Physical Education upon entrance. Subsequent posture examinations will be given whenever indicated. The results of these examinations are expressed in terms of a health and activity grade which determines the program best suited to the individual.

Freshman requirement: First semester: Three hours per week on different days.

Second semester: Two hours per week on different days.

Sophomore and Junior requirement: Two hours per week on different days.

Registration: Held simultaneously with registration for academic courses. See College Calendar for specific dates, page 7. Students who fail to register for physical education by the close of the registration period are subject to the fine for late registration.

Program of activities:

The program is posted on the Physical Education bulletin board two weeks prior to the registration dates.

Activities offered each semester: African dance, archery, badminton, Balkan folk dance, ballet, basketball, body conditioning, bowling, corrective exercises, diving, fencing, folk dance, golf, Israeli dance, jogging, modern dance, movement education, relaxation, self-defense, swimming—all levels and speed swimming, synchronized swimming, Red Cross lifesaving, water safety instructor's course—tennis, and volleyball.

¹ Absent on leave, Spring Term.

PHYSICAL EDUCATION

Activities are offered as full-semester courses.

During the autumn and spring seasons, outdoor tennis, golf and archery are offered.

In all of these activities students are advised to register according to their skill level; i.e., beginning, intermediate, or advanced.

The Physical Education Handbook explains the complete offerings of the department.

Prescribed costume: Students are required to wear the regulation costumes indicated for the various activities. Approximate cost is \$23.

The following courses are offered for academic credit:

Dance 3. Form in Dance Composition.

Study of the development of dance form through the manipulation, according to formal composition principles, of rhythm, energy and design in movement. Prerequisite: written permission of the instructor. Mrs. Soares. M 6-8 p.m., F 11-1. Autumn Term.

Dance 4. Content in Dance Composition.

Research in the source materials of dance composition and exploration of their uses in choreography. Sources include gesture, movement texture, rhythmic structure, movement shape, and literary ideas. Emphasis upon unity of style in the work of each student. Prerequisite: Dance 3 or equivalent study elsewhere. Admission with approval of the instructor. Mrs. Soares. M 6-8 p.m., F 11-1. Spring Term.

PHYSICS

PROFESSORS: HENRY A. BOORSE, POLYKARP KUSCH

VISITING PROFESSOR: SAMUEL DEVONS

ASSOCIATE PROFESSOR: RICHARD M. FRIEDBERG (Chairman; 503 Altschul Hall)

ASSISTANT PROFESSOR:

OFFICERS OF COLUMBIA UNIVERSITY OFFERING COURSES OPEN TO BARNARD STUDENTS:

Professors: Henry M. Foley, Paolo Franzini, Sven Hartmann, Leon M. Lederman, Joaquin M. Luttinger, James Rainwater, Allan M. Sachs, C. S. Wu.

ASSOCIATE PROFESSORS: CHARLES BALTAY, NORMAN H. CHRIST, WILLIAM HAPPER, W. Y. LEE.

Assistant Professors: James Christenson, Riley Newman, Paul Vanden Bout.

The department offers four distinct introductory sequences, only one of which may ordinarily be taken for credit.

- 1. Physics C1001-C1002 is designed for liberal arts students who wish to achieve a qualitative understanding of the science; taken with laboratory it satisfies the general science requirement of Barnard College.
- 2. Physics 3-4 is intended for students majoring in other sciences or preparing for medical school. It is not recommended as a foundation for more advanced work in physics.
- 3. The principal introductory sequence for prospective physics majors has in the past been the three-semester sequence, Physics C1006-C1007-C1008 or C1006-C1107-C1108. Starting in 1970-71, this sequence will be expanded to four semesters and will begin in the fall of the freshman year.

Thus, an entering freshman with a serious interest in physics should enroll in the Autumn Term in Physics C1006x, to be followed by C1007y or C1107y in the Spring. The third and fourth term of the new sequence, to be given starting 1971-1972, will cover light, heat, and atomic physics. (Consult the undergraduate office, 929 Pupin, Ext. 3348, for hours not listed below.)

A student who took Physics C1006y in Spring 1970 should continue with C1007x-C1008y or C1107x-C1108y, which will still be offered in 1970-71.

4. Freshmen with exceptional aptitude for physics and a good mathematical background may be admitted into the two-semester sequence, Physics C1021-C1022, which serves by itself as an introduction to the W3000 courses. Admission is by special interview with the instructor. A student interested in this course should, if possible, attend the "Physics Placement Meeting" announced in the Columbia College Freshman Week Program.

The program of study beyond the C1001 level, leading to a major in physics, is worked out individually with the department. Normally it includes

Physics W3003, W3007-W3008, G4015-G4016, some intermediate lab work, and W3072, plus one or more additional courses at the G4000 level. Four terms of calculus are essential, and some additional work in mathematics is recommended. The program should also include a year of chemistry, although in some instances astronomy or biology may be substituted. The major examination consists of the Undergraduate Record Examination in physics and a one-hour oral examination.

The best opportunities for women in the field of physics are open to those with graduate training. Financial assistance is available to qualified graduate students in the form of fellowships, and teaching and research assistantships, offered by graduate schools throughout the country. For students both with and without graduate training many opportunities exist in laboratories operated by the federal government, e.g., by the Departments of the Navy, Air Force, and Army, the Atomic Energy Commission, the National Aeronautics and Space Administration, and the Public Health Service; in laboratories operated by state and local governments; and in laboratories operated by many industrial firms and research institutes. In particular, medical physics constitutes an important and growing field of specialization, while teaching in private and public school systems offers challenging positions for those interested in education and public service.

C1001x, C1002y. Elementary Physics.

An introductory treatment of some crucial experiments and theories of physics. No attempt is made to survey the entire subject; instead, a limited part of it is discussed in detail to develop an understanding of the role of experiment and the nature of theory in physics. C1001: classical physics. C1002: physics of the twentieth century. This course taken with laboratory fulfills the general science requirement of Barnard College. It does not fulfill the physics requirement for admission to medical school. It is a terminal course for liberal arts students. Prerequisite: high school mathematics through intermediate algebra. Professor Devons. Lec. Tu Th 11-12:15. Recit. 1 hour to be arranged. Laboratory (optional for students not satisfying the Barnard general science requirement) hours to be arranged after the first meeting.

3-4. General Physics.

[7]

Autumn Term: Mechanics, heat, and optics. Spring Term: Electricity, magnetism, and modern physics. Prerequisite: high school mathematics; some knowledge of the elements of calculus is recommended. Professor Newman and assistants. Lec. Tu Th 10:40-12. Three hours of laboratory and one recitation hour, to be arranged at the first meeting of the class. Laboratory is required of all students wishing to receive credit for the course.

Scheduled hours for the following three courses are not yet available.

C1006x. General Physics I. Mechanics.

Fundamental laws of mechanics: kinematics; dynamics; work and energy. Parallel: Physics C1009 and Calculus I or the equivalent.

C1007y. General Physics II. Electricity and Magnetism.

Electrostatics; direct currents; electromagnetism; alternating currents; wave motion. Prerequisite: Physics C1006. Parallel: Physics C1010 and Calculus II or the equivalent.

C1107y. General Physics II. Electricity and Magnetism.

The topics of Physics C1007 are considered in greater depth, with less time spent on routine applications and with extended treatment of some of the more advanced topics. Prerequisites: same as for Physics C1007y.

C1007x. General Physics II. Electricity and Magnetism.

Same content as Physics C1007y. A continuation of Physics C1006y as offered in Spring 1970. Prerequisite: Physics C1006y. Parallel: Physics C1009 and Calculus III or the equivalent. Professor Christenson. Lec. and recit. M W F 9.

C1107x. General Physics II. Electricity and Magnetism.

Same content as Physics C1107y. Prerequisites: same as for Physics C1007x. Open only to selected students: the list will be posted on the main floor of Pupin before the start of the Autumn Term. PROFESSOR BALTAY. Lec. and recit. M W F 9.

C1008y. General Physics III. Light and Atomic Physics.

Lenses and optical systems, interference and diffraction of light, atomic structure and spectra, nuclear phenomena, elementary particles. Prerequisite: Physics C1007. Parallel: Physics C1010 and Calculus IV or their equivalent. Professor Christenson. Lec. Tu Th 9. Recit. 1 hour to be arranged after the first meeting.

C1108y. General Physics III. Light and Atomic Physics.

A continuation of Physics C1107. Open only to selected students. Prerequisite: Physics C1107. Parallel: Physics C1010 and Calculus IV or their equivalent. Professor Baltay. Lec. Tu Th 9. Recit. 1 hour to be arranged after the first meeting.

(The preceding four courses will be subject to alteration beginning 1971-72)

C1009x, C1010y. Physical Laboratory.

Selected quantitative experiments in mechanics, heat, electricity, optics, and atomic and nuclear physics. Prerequisite: Physics C1006. Parallel: Physics C1006x-C1007y, or C1006x-C1107y, or C1007x-C1008y, or C1107x-C1108y, or C1021x-C1022y. Professors Christenson and Vanden Bout. Laboratory: three consecutive hours to be arranged after the first lecture of the accompanying general physics course.

11-12. History of Physics Laboratory.

Some of the experiments which played a major role in the logical and historical development of physics are conducted, essentially in their original form and with proper attention to their historical context. Study of the appropriate historical material accompanies the laboratory work. Prerequisite: Physics 3-4 or 6-7-8. Professor Hours to be arranged.

W3001x. Some Topics in the History of Physics; 17th to 20th Centuries. Theories of light (17th/18th), early studies of electricity (18th), mechanics and electromagnetism (18th/19th), electro-technology (19th), fluid motion and the development of thermodynamics (19th), evolution

of atomic concepts (17th-20th), physics and living matter (17th-19th). (Students taking this course for 4 points will make an historical study of, and write an essay on some particular topic.) Prerequisite: Physics C1006, C1007, C1008 or permission of the instructor. Professor Devons. Hours to be arranged.

W3003x. Mechanics.

Newtonian mechanics; conservative forces and potentials; oscillations; central forces. Prerequisite: general physics and integral calculus. Professor Friedberg. M W F 10.

W3007x, W3008y. Theory of Electricity and Magnetism.

A discussion of the phenomena of electrostatics, current flow, and electromagnetism, and the description of these phenomena in mathematical terms. The treatment is directed toward the formulation of Maxwell's equations and includes some application of general principles to phenomena associated with lumped-impedance circuits, transmission lines and plane electromagnetic waves. Prerequisite: an introductory course in electricity and magnetism (Physics C1007 or equivalent). Professors Foley (W3007) and Lee (W3008). Lec. Tu Th 8:35-9:50 a.m.

W3072y. Seminar in Current Research Problems.

W3081x or y. Intermediate Laboratory Work.

Experiments are available in geometrical and physical optics, vacuum tubes and their circuits, atomic physics, and nuclear physics. An individual program of experiments is arranged for each student in accordance with her interests and previous experience. Immediately after registration and not later than the end of the second day after the beginning of classes, registrants should consult the staff member in charge about assignment to a laboratory section and the schedule of experiments to be performed. Professors Franzini and Sachs. One four-hour period weekly. Hours to be arranged by the instructor.

GRADUATE COURSES

For further information, see the Bulletin of the Graduate School of Arts and Sciences.

G4003y. Lagrangian Mechanics.

Generalized coordinates; Lagrange's and Hamilton's equations with applications including rigid bodies. Normal coordinate treatment of coupled systems. Prerequisites: integral calculus and differential equations and Course W3003 or equivalent. Professor Hartmann. M W 1:10-2:25. Problem session (optional): hours to be arranged.

G4009x. Light.

Physical and geometrical optics. Prerequisite: general physics and integral calculus. Professor Rainwater. Tu Th 1:10-2:25.

G4013x. Thermodynamics.

General principles of thermodynamics; the three fundamental laws; definition of entropy and the thermodynamic potentials; simple application of thermodynamics; microscopic interpretation of thermodynamics. Prerequisite: Physics W3003 and W3007. Parallel: Physics G4015. PROFESSOR LUTTINGER. M W F 11.

G4015x-4016y. Atomic Physics and Introductory Quantum Mechanics.

Spectroscopic and other phenomena which form the experimental basis of modern atomic physics. The interpretation of atomic structures and radiation phenomena in terms of the quantum theory. Elementary wave mechanics is developed and applied to simple atomic structures and to potential well and barrier problems. Atoms in applied fields and the interactions in many electron atoms are treated by perturbation theory. The theory of spin and angular momentum. Prerequisite: Physics C1006, C1007, C1008, or their equivalents, and two additional terms of course work in intermediate or advanced physics. Professor Harper. M W F 9. Problem session (optional): hours to be arranged.

G4040y. Nuclear Physics.

An introductory course in nuclear physics. General properties of nuclei, the systematics of stable nuclei, the two-body problem at low energies and nuclear forces, alpha radioactivity, beta decay, emission of electromagnetic radiation and selection rules, nuclear shell structure, phenomena associated with the passage of nuclear radiations through matter and methods of detection, high-energy accelerators, nuclear reactions and artificial radioactivity, neutrons and nuclear fission, properties and interaction of mesons. Prerequisite: Physics G4015 or the equivalent, Professor Wu, Tu Th 11-12:15.

G4050y. Elementary Particle Physics.

POLITICAL SCIENCE

Professor: Demetrios Caraley (Chairman; 409 Lehman Hall)

ASSOCIATE PROFESSOR: PETER H. JUVILER1

ASSISTANT PROFESSORS: BARNETT BARON, DENNIS DALTON, JOHN T.

ELLIFF

LECTURERS: STUART FAGAN, ANNETTE B. FOX

INSTRUCTORS: LYNN DAVIS, BRUCE FELD, ELIZABETH HOWE

OFFICERS FROM OTHER FACULTIES OF COLUMBIA UNIVERSITY OFFERING INSTRUCTION TO BARNARD STUDENTS:

PROFESSORS: CHARLES V. HAMILTON, HARVEY C. MANSFIELD

ASSOCIATE PROFESSORS: BRUCE L. R. SMITH, DOUGLAS A. CHALMERS

ASSISTANT PROFESSOR: IRA KATZNELSON

INSTRUCTOR: RICHARD PIOUS

The purpose of the study of political science is to develop understanding of the basic political institutions and processes in human society. This understanding involves analysis and evaluation of political systems in the context of the challenges they face and the changes they undergo. The major is designed to equip the student to play an effective role as citizen in a democratic political order, to participate more actively in political life as public or party official, civil servant, lawyer, or political commentator, or to undertake graduate training in political science in preparation for a career in college teaching.

A student majoring in political science is required to take a minimum of nine semester-courses in the Department, including Courses 1; either 2, 11, 13, or 14; and 45. A student majoring in urban studies with a concentration in political science is required to take a minimum of six semester courses including Courses 1, V3313, and two from among: 26, 28, 30, V3407. In order to explore more adequately the techniques of scholarly investigation and to have the opportunity of independent specialized work, both majors and concentrators are required to write a senior essay as part of the work for the senior research seminar (either Course 61-62 or V3711x-3712y).

The department's requirements are flexibly drawn so as to permit a major in consultation with her adviser to plan an overall program that, while providing some background in various areas of government and politics, can place special emphasis on such particular interests as the American political system (including its urban subsystem), foreign political systems, international relations, or political thought.

Other social sciences: In view of the essential unity of the social sciences, students majoring in political science are urged to take at least three courses from among the following departments as selected in conference with the adviser: anthropology, economics, history, sociology.

¹ Absent on leave, 1970-71.

GENERAL COURSES

Courses listed under this heading may be taken without previous study of political science.

1. Dynamics of American Politics.

[3]

An introduction to political dynamics through an examination of the American political system at the national level. Particular attention is given to how political officials are chosen and replaced, how governmental decisions are made, and how governmental performance affects demands on and support for the political system. Mr. Feld and other members of the Department. Lectures M W 11. Discussion groups (choose one): M 2:10, 3:10; W 12:10, 1:10; Th 11; F 10, 11.

Sign-up sheets for discussion groups at different hours are posted outside 408 Lehman.

2. Comparative Politics.

[3]

Examination of basic approaches to the study of comparative politics and analysis of selected political systems in Europe and Africa. Professor Baron. M W F 11.

4. Freshman Seminar in Government.

[0]

Intensive study of a topic to be selected by the instructor. The aim of the course is to acquaint students with the methods and sources of political science and to provide experience in discussion and writing. Topic for Spring 1971, instructor and hours to be announced in December.

7. Modern Political Movements.

[7]

A tentative inquiry into the roles of deviance and dissent in organized society, and the types of political movements; selective case studies of movements such as anarchism, Marxism, fascism, nationalism, and movements of racial or ethnic self-assertion. Professors Dalton and Baron. Lec. Tu Th 10:35-11:50. Optional discussion groups at hours to be arranged.

V3313y. American Urban Politics.

[2]

Patterns of government and politics in America's large cities and suburbs. Analysis of the influence of party leaders, local officials, social and economic notables, racial, ethnic and other interest groups, the press, the general public, and the federal and state governments. The impact of urban governments on ghetto and other urban conditions. Professor Caraley and Mr. Feld. Lec.: M W 11-11:50 and periodic discussion sections to be arranged.

11. International Politics.

[K]

An exploration of the basic setting and dynamics of global politics, with emphasis on contemporary problems and processes. Open to freshmen only with permission of the instructor. Mrs. Davis. M W 2:10-3:25.

12. International Organization.

[5]

Regional, functional and universal international organizations both as components of the international political system and as forces for change. Mrs. Davis. M W 2:10-3:25.

13, 14. Political Theory.

[9]

Analysis of major political writings from Plato to the present. Emphasis is on a comparison of basic ideas and concepts. Professor Dalton. T Th 2:10-3:25.

SPECIALIZED COURSES

- 15y. The Making of American Foreign and Military Policy. [2]
 Analysis of the formulation and implementation of American foreign and military policies, with emphasis on the period since World War II.
 Prerequisite: Course 1, 11, or permission of the instructor. Mrs. Davis. M W F 10.
- 16. The Bases of Political Behavior.

 Analysis of how and why people become involved in politics and of various forms of political expression. Readings on the social and personality bases of political behavior. Prerequisite: Course 1 or 2. Professor Baron. W 2:10-4 and third hour to be arranged.
- [19. Soviet Politics. Professor Juviler.

Not given in 1970-71.]

- [20. Colloquium on Communism and Revolutionary Change.
 PROFESSOR JUVILER.
 Not given in 1970-71.]
- [21. Colloquium on Soviet Foreign Policy. Not given in 1970-71.]
 PROFESSOR JUVILER.
- C3650y. The Latin American Political Experience.

 The evolution of the Latin American political systems; their distinctive ideas, forms and experiences. The interplay of multiple heritages, and the emergence of distinctive national political cultures. Prerequisite: Course 2. Professor Chalmers. M 3:10-5.
- 23. African Politics. [2]
 Comparative analysis of selected African political systems, with emphasis on the problems of development and modernization. Prerequisite: Course 2 or permission of the instructor. Professor Baron. M W F 10.
- 24. Asian Political Systems. [7]
 Comparative analysis of Asian national experiences and political ideas, with particular attention to China and India. Prerequisite: Course 2 or permission of the instructor. Professor Dalton. Tu Th 10:35-11:50.
- 25. The Judicial Process.

 Analysis of the process of judicial decision-making and the role of courts and judges in the American political system. Prerequisite:

 Course 1 or permission of the instructor. Professor Elliff. Tu Th 9:10-10:25.
- 26. Problems in Civil Rights and Liberties.

 Analysis of the political and legal context for current issues in freedom of speech and religion, racial discrimination, the right to privacy, and criminal law enforcement. Prerequisite: Course 1. Professor Elliff. Tu Th 9:10-10:25.

[27. Colloquium on the Content of American Politics.

Professor Caraley. Not given in 1970-71.]

28. Colloquium on Congressional Politics.

[9]

The interrelations of structure, process, and policy output in the American Congress, including the legislative role of the President. First-hand examination of hearings, reports, debates and voting patterns, and preparation during reading period of case studies on individual bills. Prerequisite: Course 1 or V3313. Professor Caraley. Tu 2:10-4.

C3315x. Studies in Urban Political Problems and Policies.

An analysis of urban political problems within the context of urban stratification, conflict, and policy-making. Substantive topics include the politics of housing and urban renewal, education, poverty and welfare, finance, ghetto violence and the role of the police. Prerequisite: V3313 or permission of the instructor. Professor Katznelson. M W 11-12:15.

V3407y. Colloquium on Urban Black and Minority Politics.

Comparative analysis of the politicization of urban ethnic groups, with emphasis on the emerging political patterns and problems of black urban communities. Open only to Barnard and General Studies students. Prerequisite: Course 1 or V3313y, and junior standing. Enrollment limited, sign up sheet on bulletin board, 408 Lehman. PROFESSOR HAMILTON. Th 10-11:50.

F3311x. The American Party System.

Ways by which interests outside government achieve political influence at the national level; factors which promote stability and legitimacy in an age of rapidly growing demands. Primary emphasis on political parties, with attention to political participation, interest groups, and electoral behavior. Prerequisite: Course 1 and junior standing. Professor Smith. M W 11-12:15.

C3312x. Executive Politics and Decision-making.

An analysis of interagency politics and bargaining within the executive branch of the national government of the US, and its implications for the public policy process. Prerequisite: Course 1. Mr. Pious. M W 2:10-3:25.

[30. Bureaucratic Power in American Politics. Not given in 1970-71.]
MR. FELD.

31. American Political Thought.

[a]

An analysis of ideas, beliefs and doctrines underlying American democracy. With emphasis on the Revolutionary period, the Progressive era, and the present time. Prerequisite: Course 1 or permission of the instructor. Professor Elliff. Tu Th 2:10-3:25.

COURSES FOR MAJORS AND CONCENTRATORS ONLY

Admission to particular sections of the junior colloquium and senior seminar is limited: During spring pre-registration students must sign up on sheets outside 408 Lehman for the junior colloquium section of their choice and must obtain permission of the instructor of the section desired in the senior seminar.

45x or y. Junior Colloquium on Concepts and Methods.

[0]

Analysis of central concepts and methodological techniques of political science. Professors Baron and Elliff and Mrs. Davis. Autumn: Section I M 2:10-4. Section II Tu 2:10-4. Spring: Section I M 2:10-4. Section II Th 2:10-4.

V3711x-V3712y. Senior Research Seminar in American Politics.

Discussions, conferences, and the writing of a senior essay on selected topics of American public policy and politics. Section II concentrates on urban and congressional politics.

Section	I	Professor Mansfield.	Th 4:10-6.
Section	II	Professor Caraley.	Tu 4:10-6.

Note: Admission to Section I also requires permission of the Barnard chairman.

61-62. Senior Research Seminar.

[0]

Discussions and conferences on the researching and writing of the senior essay.

Section	I	(replaced by V3711x-V3712y).	
Section	II	Professor Elliff.	Tu 4:10-6.
[Section	III	Not given	in 1970-71.]
Section	IV	Professor Baron.	W 4:10-6.
Section	V	Dr. Fox and Mrs. Davis.	W 4:10-6.
Section	VI	Professor Dalton.	Th 4:10-6.
Section	VII	Mr. Feld.	W 4:10-6.

GRADUATE COURSES

Certain graduate courses given in the University are open to qualified majors with the consent of the department and the major adviser. These courses are described in the Bulletin of the Graduate School of Arts and Sciences.

PSYCHOLOGY

PROFESSOR: RICHARD P. YOUTZ (Chairman; 415F Milbank Hall)

ASSOCIATE PROFESSOR: BARBARA S. SCHMITTER

ASSISTANT PROFESSORS: EDWARD S. COBB, BARBARA MATES, THOMAS

BIDDLE PERERA, RUTH L. RUTSCHMANN

VISITING ASSOCIATE PROFESSOR: ALVIN L. ATKINS

VISITING ASSISTANT PROFESSORS: LANNY FIELDS, ADELBERT JENKINS

INSTRUCTOR: SANDRA F. STINGLE

ASSISTANTS: BONNIE FOX, ANDREW KARR, NICHOLE MARCHAL, BARRY

TRACHTMAN, ROSALIND WU

A major in psychology: The student majoring in psychology studies the basic principles, methods, and findings of psychology and is introduced to their most important applications.

The groupings of courses given below are arranged in accordance with varying interests; the student should select one of the plans (a), (b), (c), or (d). The student is also advised to consult the catalogue of Columbia College for relevant courses. Courses offered in the School of General Studies may be acceptable for Barnard degree requirements but, at present, require additional fees. Columbia and General Studies space limitations may restrict the availability of these courses to Barnard students. In addition to the offerings listed in the announcement, advanced senior students with special interests may take appropriate courses in graduate school.

(a) General major: A student completing this major will have a good general background for activities in psychology or related fields, such as education, business, school psychology, psychometrics, personnel and social work, and similar areas. The major may be completed by fulfilling the following requirements:

Psychology: Courses 1, 5, 8, 9, one, or both, of 57 and 68; one other laboratory course, and other courses selected in consultation with the major adviser to complete the required 8 courses in the department.

Other fields: One course in philosophy, or Anthropology 1, 2; a one-year laboratory course in biology, physics, or chemistry.

- (b) It is suggested that students who plan to obtain postgraduate professional training in clinical psychology, school psychology, vocational or rehabilitation counseling, or educational guidance should, in addition to the courses required for the major, include Courses 12, 16, 27, and two of the following: Courses 20, 21, 25, 38.
- (c) Students interested in professional work in business or personnel should add the following to the requirements for the general major: Course 12. Economics 1, 2; 17, 18; and F3451y may be substituted for work in other fields.

(d) Students who wish to take postgraduate work in experimental psychology should add the following to the requirements for the general major: Courses 17, 57 and 68. In other fields work should include: full-year laboratory courses in two of the following: biology, physics, or chemistry; two semesters of calculus.

The major examination: This consists of section on: (1) general information and integration (two hours); (2) experimental design and techniques (one hour); and (3) areas of special interest (two hours). Students fulfilling any one of the four plans will have completed preparation for the major examination.

LABORATORY SCIENCE REQUIREMENT: The college requirement in laboratory science may be satisfied by taking any two of the following courses: 5, 8, 12, 17, 20, 27, 30.

1x (or 1y). Introduction to Psychology.

[11]

An introduction to the chief facts, principles, and problems of human behavior, through systematic study of a text, lectures, exercises, brief participation in a current investigation, and reading in special fields. Prerequisite for all other courses. PROFESSORS COBB, MATES, PERERA, RUTSCHMANN, and YOUTZ.

Autumn Term					Spr	Spring Term					
Section	I	M	W	\mathbf{F}	9.	Section	I	M	W	F	9.
Section	II	M	W	\mathbf{F}	10.	Section	II	M	W	F	10.
Section	III	M	W	\mathbf{F}	11.	Section	Ш	M	W	F	11.
Section	IV	M	W	\mathbf{F}	1.	Section	IV	M	W	F	1.

5. Psychology of Learning.

[8]

The basic methods, results, and concepts in the experimental analysis of learning. Laboratory work consists of experiments and demonstrations which mostly employ albino rats as subjects. Preparation of experimental reports is a major part of the course. Assignments deal mostly with experiments on infra-human organisms. Prerequisite: Course 1. Professor Cobb and assistants. Lec. Tu Th 11. Lab. (1 hour lecture, 2 hours projects). Tu 2:10-5, W 1:10-4, Th 2:10-5.

8. Perception.

[8]

An introduction to the problems, methods and results of studies in perceptual behavior. The literature will be surveyed; key experiments will be discussed in detail. Problems of definition and experimental method will be emphasized. In the laboratory students will conduct a series of typical experiments and will prepare systematic reports of their results. Prerequisite: Course 1 or the equivalent. Not open to freshmen. Professor Perera and assistants. Lec. Tu Th 11. Lab. (1 hour lecture, 2 hours projects) M 1:10-4, Th 2:10-5.

9. Statistical Design.

[6]

An introduction to statistics and experimental design in psychology and allied subjects. Descriptive statistics, probability, and elementary procedures of statistical inference will be treated. The laboratory will provide students with empirical demonstrations of theorems used, but not mathematically derived, in the lectures, together with practice in

the application of elementary statistical methods. Prerequisite: Course 1 or the equivalent. Professor Fields and assistant. Lec. T Th 9:10-10:25. Lab. (1 hour) Tu 10:35-11:25, Tu 12:10-1.

12. Psychological Measurement.

[2]

Introduction to test theory, including concepts of item construction, standardization, reliability, validity, and motivation. Emphasis is on design and research related to major categories of current tests. Laboratory projects will be concerned with constructing and evaluating test items under experimental conditions, with assessing various methods of test administration, and with the quantitative procedures necessary for such evaluations and assessments. Prerequisite: Course 1 and one course in statistics. Professor Schmitter and assistant. Lec. M W 10. Lab. (1 hour lecture, 2 hours projects) W 2:10-5, Th 2:10-5.

16. Theories of Learning.

[6]

A comparative study of the major accounts of the learning process. The course stresses the relation between each theory and the type and quality of research which is said to be generated by it. Seminar course limited to 20 students. Prerequisite: Courses 1, 5, and at least junior standing. Professor Cobb. Tu Th 9:10-10:25.

17. Physiological Psychology.

[4]

An introduction to the study of the relationships between bodily processes and behavior. Emphasis is placed upon the basic anatomy and physiology of sensory and motor functions, motivation, emotion, learning, and behavior disorders. The laboratory consists of individual and group experiments in these areas of study, and exercises on the anatomy of sense organs and the brain. Prerequisite: Course 1. Professor Perera and assistant. Lec. M W 1:10-2. Lab. (1 hour lecture, 2 hours projects) Tu 2:10-5, W 2:10-5.

20. Language and Speech Development and Disorders.

[4]

The psychological study of language and speech. Clinical and psycholinguistic consideration of language and speech perception, cognition, production, normal development, and pathology. Methods of experimental study, various theories, and problems are treated. Laboratory consists of experiments and projects, with systematic reports. Prerequisite: Course 1. Professor Mates and assistants. Lec. M W 1:10. Lab. (1 hour lecture, 2 hours projects) M 2:10-5, Tu 2:10-5.

21. Abnormal Psychology.

[2]

The field of psychopathology, history, more common forms of mental inadequacy and disturbance and their psychological interpretation, including principles of mental hygiene and psychotherapy. Each class takes two trips to institutions for demonstrations of psychoses and deficiencies. Open to juniors and seniors who have had Course 1. Professor Youtz. M W 10.

[24. Applications of Psychological Techniques. Not given in 1970-71.] Professor Mates.

25. Psychology of Personality.

[6]

Contemporary theories of the development and organization of personality and their relation to other forms of psychological theory. Points

of view discussed include those of Freud, Adler, Jung, neo-Freudians such as Horney and Sullivan, and others, including Murray and Kelly. Consideration is given to clinical applications of the theories. Prerequisite: Course 1 or the equivalent. Professor Schmitter. Tu Th 9:10-10:25.

27. Developmental Psychology.

[3]

Comparative and experimental analysis of developmental transitions from simple to complex behavior. Consideration of genetic and environmental factors. Emphasis on human ontogeny from conception to maturity. Laboratory includes observations, experiments, and demonstrations of sensori-motor, intellectual, linguistic, social, moral, and emotional development of children. Preference to juniors and seniors. Prerequisite: Course 1. Professor Mates and assistants. Lec. M W 11. Lab. (1 hour lecture, 2 hours projects) M 2:10-5, Tu 2:10-5.

30. Psychology of Thinking.

[3]

Survey of contemporary experimental approaches to the understanding of concept formation and problem-solving behavior, derived from learning theory, psycho-linguistics, logic, and information theory. The laboratory will consist of experiments and demonstrations of thinking behavior in animals, children, and adults. Prerequisite: Course 5. Professor Cobb and assistant. Lec. M W 11. Lab. (1 hour lecture, 2 hours projects) Tu 2:10-5, W 1:10-4.

38. Social Psychology.

[6]

An introduction to the study of social behavior. Among the topics considered are social learning, interaction, group behavior, and verbal behavior. Experimental contributions to the understanding of social phenomena are emphasized. Prerequisite: Course 1. Professor Atkins. Tu Th 9:10-10:25, and conference hour in connection with a project or paper.

39. Seminars on Special Topics: Psychological Analysis of Racism. [0]

Psychological factors influencing the development and expression of racist attitudes and actions, with special reference to black-white confrontation. Emphasis on psychodynamic studies of hostility, anger, self-concept, mechanisms of defense, and other factors that produce and reduce racism. Each student will write an original research paper. Limited to 20 students. Prerequisite: Courses 1 and, if convenient, 25, or written permission of the instructor. Professor Jenkins. Tu 4:10-6.

48x (or 48y). Individual Projects.

[0]

Research projects will be planned in consultation with members of the department. Open to majors who have had Courses 5 and 8, on written permission of the member of the department who supervises the project. Members of the Department. Hours to be arranged.

49. Teaching Apprentice Seminar.

[0]

An intensive analysis of the principles of conditioning covered in Course 5. In addition to supplementary materials, students read the material assigned to Course 5 students, prepare Reading Evaluation Forms, and demonstrate in the seminar superior comprehension of the subject matter. Individual work with Course 5 students. Prerequisite: Course 5 and permission of the instructor. Professor Cobb. Tu 12:10-2.

57. Systems of Psychology.

[8]

A comparative summary of the more influential schools and points of view in psychology, past and present. Each student prepares a paper reporting on an important person, institution, or subject matter area. Prerequisite: Courses 5 and 8 or the equivalent. Professor Youtz. Tu Th 11.

68. Case Histories in Experimental Design.

[8]

Discussion of stages in the experimental development of psychological concepts. Nonstatistical analysis of procedures and justifiable conclusions at stages of: speculation, measurement, observed relation, experiment, and theory construction. Application to articles in current journals, both experimental and clinical. Each student will choose an area of interest and prepare a paper reporting on its origins and present status. Prerequisite: Course 5 or 8 or the equivalent. Professor Youtz. Tu Th 11.

The following Barnard courses may be of interest to majors. Some have prerequisites.

Anthropology V3027y (Culture and the Individual)

Biology 8 (Ecology)

[Biology G4212y (Animal Behavior).

Not given in 1970-71.]

Linguistics 21, 22 (Introduction to Linguistics)

Sociology 46 (Social Structure and Personality)

RELIGION

PROFESSOR: THEODOR H. GASTER (Chairman; 219C Milbank Hall)

ADJUNCT PROFESSOR: JOHN L. MISH

VISITING PROFESSOR: ALBERT W. SADLER

VISITING ASSISTANT PROFESSOR: JAMES H. CONE

ASSISTANT PROFESSORS: ELAINE H. PAGELS, JOHN B. SNOOK 1

OFFICERS OF COLUMBIA UNIVERSITY OFFERING COURSES OPEN TO BARNARD STUDENTS:

PROFESSORS: JOSEPH L. BLAU, J. A. MARTIN, JR.

ADJUNCT PROFESSOR: JOHN MEYENDORFF

ADJUNCT ASSOCIATE PROFESSOR: DAVID WEISS

ASSISTANT PROFESSORS: JAMES W. ARMANTAGE, J. STANLEY BARLOW, CARL HESTER. ROBERT F. OLSON

INSTRUCTOR: REUBEN RAINEY

The purpose of the program is (a) to introduce the field of religion in general; (b) to present the thought, documents and history of the major religious systems of the East and West; and (c) to give students an insight into the distinctive approach of each towards the analysis of the human condition and the solution of its problems. The courses are designed not only for those who may wish to specialize in religion, but also as a cross-fertilization of general studies in the humanities, e.g. in history, literature and philosophy.

The program of study for a major in religion is to be planned in consultation with members of the department by the end of the sophomore year. Ten semester courses are required, distributed as follows:

(i-ii) V1101, V1102: Introduction to the Study of Religion

(iii-iv) Two semester courses in Western religions, one of which may be a seminar

(v-vi) Two semester courses in Eastern religions, one of which may be a seminar

(vii) One semester course in Bible (either Old or New Testament)

(viii) One semester course in Religion and Culture

(ix) One additional seminar, or V1001x: Major Topics in the Study of Religion.

(In cases of exceptional promise, the Reading Course 35 or 36 may be substituted)

(x) W3502: Seminar in Methodology (In cases of exceptional promise, the Reading Course 35 or 36

may be substituted)

In addition, majors in religion are expected to take four semesters of course-work in related departments. The selection must be made in conjunction with the student's major advisor.

¹ Absent on leave, Autumn Term.

Majors in religion will be required in their last year to write a senior essay in conjunction with one of their seminars or, if they are deemed eligible for it, with the Reading Course, 35 or 36. The topic and development of the essay will be subject to departmental approval and supervision.

Students contemplating graduate work in religion are strongly advised to develop a reading knowledge of such languages as Greek, Latin, Hebrew, Arabic or Chinese, depending on the area of concentration. Courses in these languages will be accepted towards meeting the requirement of study in related subjects.

In courses where several sections are offered, Barnard students are expected to take Barnard sections. Only in cases of schedule conflicts will permission be given to substitute parallel sections at Columbia.

GENERAL INTRODUCTION AND SURVEY

V1101x, V1102y (or V1102x, V1101y). Introduction to the Study of Religion.

The phenomenology of religious experience and the historical forms of religious life. A survey of the presuppositions, data and documents of the religions of East and West, Autumn Term: The religions of the Ancient Near East and Greece; major themes in Judaism and Christianity. Spring Term: Eastern religions.

Barnard:

Section V Autumn Term: Professor Pagels; Spring Term: Professor Snook. M W F 10:00-10:50.

Columbia:

Section I Professor Barlow. M W 2:10-3:25.

Section II Professor Hester. Tu Th 6:10-7:25.

Section III Mr. RAINEY. Tu Th 9:00-10:15.

Section IV Professor Armantage. Tu Th 2:10-3:25.

V1102x, V1101y. (For those wishing to begin the course with the Study of Eastern religions.)

Barnard:

Section VII PROFESSOR GASTER. Tu Th 10:35-11:50.

Columbia:

Section VI Professor Olson. M W F 11:00-12:15.

V1001x and y. Major Topics in the Study of Religion.

A one-semester introduction to the major concerns of religion in the East and West, with special attention to such topics as myth and ritual, reason and revelation, authority, law and community, priesthood, the role of symbolism, the concept of the sacred, the idea of God.

Barnard:

V1001y, Section I. Professor Gaster. Tu Th 9:10-10:25.

Columbia:

V1001x Mr. RAINEY. M W F 10:00-11:00. V1001y, Section II. Professor Martin. Tu Th 11:00-12:15.

BIBLE

W3201x. Introduction to the Old Testament.

An introduction, by critical methods, to the religious history and literature of Israel in the Old Testament period, with illustration from Ancient Near Eastern sources.

Barnard:

Section I. Professor Gaster. Tu Th 9:10-10:25.

Columbia:

Section II. Professor Armantage. Tu Th 6:10-7:25.

V3202y. Introduction to the New Testament.

An introduction, by critical methods, to the religious history and literature of the Christian movement in the New Testament period.

Barnard:

Section I. Professor Pagels. M W F 10:00-10:50.

Columbia:

Section II. Professor Armantage. Tu Th 6:10-7:25.

Archaeology-Religion G4169x-G4170y. Archaeology of the Bible.

The Palestinian sites which provide important information concerning the background of Biblical religion. Autumn Term: The Middle Bronze and Late Bronze ages. The period of the Judges. Spring Term: From the beginning of the Monarchy to the Conquest by Alexander the Great. Professor Teixidor. W 4:10-6:00.

WESTERN RELIGIONS

CHRISTIANITY

14. From Paganism to Christianity

[6]

Classical backgrounds of early Christianity. Religious syncretism in the Hellenistic world. Mystery religions. Intertestamental literature. Influence of Classical thought on the Church fathers. Professor Pagels. Tu Th 9:10-10:25.

[V3204y. Early Christianity in the Light of the Classical Heritage.

Not given in 1970-71.]

15, 16. History of Religious Thought in the West.

[7]

15. Representative religious thinkers from the Classical period to Ockham, with emphasis on the faith-reason and universal controversies, the presuppositions of medieval theology, and the significance of the trivium and of chiliastic writings.

16. Representative religious thinkers from the Renaissance to the present day, with emphasis on attitudes toward Biblical translation, language, millenarian tendencies, and the presuppositions of selected religious communities and theological systems. Professor Pagels. Tu Th 10:35-11:50 (both terms).

[17, 18. Western Religious Institutions.

Not given in 1970-71.]

PROFESSOR SNOOK.

W3232y. Eastern Christian Thought.

The development of the religious mind in the Christian East since the time of the Greek fathers. The Byzantine spiritual and intellectual legacy in the Balkans and the Middle East. Russian religious thought. Professor Meyendorff. Tu 3:40-6:30.

[W3234y. Catholic Thought after Trent.

Not given in 1970-71.]

JUDAISM

W3237x-W3238y. History of Judaism.

History of the Jewish Religion from its beginnings to contemporary manifestations in Israel and the United States. Autumn Term: Early background and formation of Judaism. Spring Term: From the Rabbinic period to the present. Professor Blau. Tu Th 4:10-5:25.

W3214v. Introduction to Talmudic and Geonic Literature.

Documents in the history of post-Biblical Hebrew literature. Selections from Mishna, Mechilta, Midrash, Gemara, and Geonic literature. Pro-FESSOR WEISS. M W 1:10-2:25.

EASTERN RELIGIONS

HINDUISM

53. History of Hinduism.

A survey of the philosophies and history of Hinduism. The Vedic and Brahmanic periods. The Upanishads. Vedanta. Yoga. The darsanas. Modern developments. Professor Mish. W F 9:10-10:25.

[V3251x.—History of Hinduism.

Not given in 1970-71.]

BUDDHISM

54. History of Buddhism.

An introduction to the thought, literature and history of Buddhism. Hinayana and Mahayana. Chinese and Japanese Buddhism. Zen. Lamaism. Professor Mish. M W F 9:10-10:25.

V3252x. History of Buddhism.

Change and continuity in the development of Buddhist thought and institutions during the expansion of Buddhism from India to Tibet, China and Japan. Prerequisite: Course V1102 or permission of the instructor. Professor Olson. Tu Th 2:10-3:25.

[W3202y. History and Sociology of Buddhism in South-East Asia.

Not given in 1970-71.]

CHINESE AND JAPANESE RELIGIONS

W3253y. Chinese and Japanese Religious Thought.

Nature religions, philosophical movements, and Buddhist developments in China and Japan. Professor Olson. M W 2:10-3:25.

ANCIENT NEAR EASTERN RELIGIONS

[31. Ancient Near Eastern Religions.

Not given in 1970-71.]

PROFESSOR GASTER.

PRIMITIVE RELIGION

Anthropology V3042y. Primitive Religion.

Ideological systems of simple and pre-industrial cultures. Relations between religion and other aspects of culture. Prerequisite: an introductory course in anthropology. Instructor and time to be announced.

RELIGION AND CULTURE (THEORY AND FUNCTIONS OF RELIGION)

25. Religion in Contemporary Society.

[9]

The place of religious institutions on the contemporary scene, East and West. Consideration will be given to the historical antecedents of the present situation, characteristics of the major types of existing institutions, and to some of the problems posed by new forms of religious group life, e.g. in Japan. Professor Sadler. Tu Th 2:10-3:25.

26. Religion in Contemporary Culture.

[9]

Atheism in the West; a study of the role of atheism in Western religious thought. Among the authors discussed are both critics and defenders of religious tradition, including Hegel, Schleiermacher, Feuerbach, Marx, Kierkegaard and Nietzsche. Open to all except freshmen. Professor Hester. Tu Th 2:10-3:25.

Religion-Sociology G4400x. Sociology of Religion.

Major theoretical approaches to the relationship between religious values and social institutions, in readings from Durkheim, Pareto, Malinowski, Marx and Max Weber. Problems in the comparative evaluation of religious systems and their social and cultural consequences. Instructor and time to be announced.

64. (History 64.) The History of Religion in America.

[5]

Religious thought and institutions from Colonial times to the present; their influence on American political and social history through the work of representative individuals. Professor Snook. M 2:10-3.

[G4401y. The Role of Language in Religious Existentialism.

Not given in 1970-71.]

27. Black Theology.

[5]

A philosophical and theological analysis of the meaning of black theology and its relationship to black power and contemporary theologies; a careful look at the meaning of God, Christ, man and the world in the light of black theology. Prerequisite: junior or senior standing or permission of the instructor. Professor Cone. M 1:10-3.

SEMINARS

Students who are not religion majors must obtain permission of the department.

W3501x. Methodology in the Study of Religion.

Primarily for majors preparing senior essays, the seminar is designed to acquaint students with the various approaches to the study of religion. MEMBERS OF THE DEPARTMENT. M 2:10-4.

W3503x, W3504y. Religious Thought.

W3503x:

Section I. The World of Myth.

Representative religious myths of the East and West in the light of comparative study. The science of mythology. The role of myth today. PROFESSOR GASTER. Tu 3:55-5:35.

Section II. Esoteric Tradition and Occult Religion.

Heresies, dissent and non-normative movements in the major religions. Professor Pagels. W 3:35-5:25.

Section III. Major Trends in Modern Religion.

A colloquium with visiting authorities on Eastern and Western religions. Special attention will be given to current developments. Open to students of all departments. M 4-6.

W3504y:

Section I. Topic, instructor and time to be announced.

Section II. Psychological and Psychoanalytic Interpretation of Religious Thought.

Psychological and psychoanalytic theories of religious thought and practice: Freud, Jung, Erikson and others. Professor Snook. W 3:35-5:25.

READING COURSE

35, 36. Guided Reading and Research.

[0]

A program of study designed to give outstanding majors an opportunity to pursue independently a subject of their choosing. A written essay is required of students taking this program. Consultation periods to be arranged with adviser. Members of the Department.

RUSSIAN

PROFESSOR: RICHARD F. GUSTAFSON (Chairman; 226B Milbank Hall)

ASSISTANT PROFESSOR: MARINA LEDKOVSKY

ASSOCIATES: ANATOL K. SAPRONOW, ZOYA TRIFUNOVICH

Instructors: Marianna Sapronow, Anya Luchow

OFFICERS OF COLUMBIA UNIVERSITY OFFERING COURSES OPEN TO BARNARD STUDENTS:

PROFESSORS: WILLIAM E. HARKINS, ROBERT A. MAGUIRE, RUFUS W.

MATHEWSON, JR.

ASSISTANT PROFESSOR: JOHN MALMSTAD

INSTRUCTOR: NICHOLAS OZEROV

ASSOCIATE: ROSE RASKIN

The Russian Department offers courses in both language and literature. Besides a full four-year sequence in language work, there are specialized courses in major Russian authors and important periods in Russian literature. Students should consult Mr. Gustafson in choosing language courses beyond the second year. For those who know no Russian, the department also gives a series of courses in Russian literature taught in English.

The major in Russian at Barnard is a liberal arts program designed to help the student obtain reasonable fluency in the spoken and written language, a reading command of Russian adequate for interpreting literary texts, and a comprehensive knowledge of Russian literature, especially of the nineteenth and twentieth centuries. Students will be encouraged to take one year of Russian history and to select relevant courses in philosophy, art, music, and other literatures. The requisites to the major, in most cases to be completed before the junior year, are Russian 4 (or its equivalent) and Russian V1225x, V1226y. The minimum for the major is 8 courses in language and literature. No courses with readings exclusively in English may be included in the minimal major program. Normally majors are required to take Russian V3333x, V3334y; two fourth-year language courses, and at least one semester of the seminar.

FOREIGN LANGUAGE REQUIREMENT FOR THE DEGREE: All students must take a placement examination before entrance. This examination tests the student's knowledge of grammar, her comprehension of written and spoken Russian, and her ability in free composition. Students receiving a sufficiently high grade will automatically fulfill the requirement. All others must complete Russian 4 or any course beyond that level.

LANGUAGE COURSES

1-2. Elementary Full-Year Course.

[16]

Grammar, reading, composition. Oral practice in small groups. Language analysis: Professor Gustafson and Mrs. Luchow. Section I

M W F 10. Section II M W F 12:10. Oral practice: Mr. and Mrs. SAPRONOW. M W F 9, M W F 11, M W F 1:10, M W F 2:10, M W F 3:10. Other hours to be arranged.

3-4. Intermediate Course.

[16]

Grammar review, composition, reading. Oral practice in small groups. Language laboratory work required. Prerequisite: Course 2 or the equivalent. Language analysis: Mrs. Trifunovich. Section I M W F 10. Section II M W F 12:10. Oral practice: Mr. and Mrs. Sapronow. M W 10, M W 11, Tu Th 9, Tu Th 10, Tu Th 11.

5, 6. Oral Russian, Third Year.

Discussion of texts, oral reports, dialogues. Open only to students enrolled in Russian V3333x, V3334y. The second term may be taken without the first. No credit. Mr. and Mrs. Sapronow. Tu Th 12:10.

7. Guided Readings in Russian, Intermediate Level.

Extensive reading in Russian prose with primary stress on building vocabulary and speed. Student participation in choice of reading material. Prerequisite: Russian 2 and permission of the instructor. Mrs. Luchow. First meeting Th 1:10.

V3331x, V3332y. Readings in Russian Literature.

Emphasis on conversation and composition. Reading and discussion of selected texts from nineteenth and twentieth-century Russian literature. Lectures, papers, and oral reports. Conducted entirely in Russian. Prerequisite: two years of Russian or permission of the instructor. Professor Ledkovsky. M W F 1:10.

V3335x, V3336y. Advanced Language Course, Third Year.

Emphasis on problems of modern Russian usage and grammar. Designed to acquaint the student with various modes of the written and spoken language. Prerequisite: two years of Russian or permission of the instructor. Mr. Ozerov. M Tu W Th F 2:10.

V3443x, V3444y. Advanced Russian: Syntax and Style.

Autumn Term: Systematic study of problems in Russian syntax; written exercises, translations into Russian, and compositions. Spring Term: Discussion of different styles and levels of language, including word usage and idiomatic expressions; written exercises, analysis of texts, and compositions. Conducted entirely in Russian. The second term may be taken without the first. Prerequisite: three years of Russian or permission of the instructor. Mrs. Trifunovich. M W F 2:10.

9, 10. Oral and Written Russian: Advanced Course.

[10]

Selected texts in philosophy, criticism, and literature of twentieth-century Russia are read to provide a context for discussion. Lectures and reports on music, architecture, and painting of the modern period. Frequent compositions. Conducted entirely in Russian. Recommended for students who wish to improve their active command of Russian. The second term may be taken without the first. Prerequisite: three years of Russian or permission of the instructor. Mr. Sapronow. M W 3:10. Third hour to be arranged.

LITERATURE COURSES

For nonmajors, courses marked thus § will count toward the general college requirement.

V1225x, V1226y. Survey of Russian Literature.

Literature from Pushkin through the modern period, with emphasis on the prose masterpieces of the nineteenth century. The second term may be taken without the first. A knowledge of Russian is not required. PROFESSOR MALMSTAD. M W F 11.

V1227y. Tolstoy and Dostoevsky.

Analysis of the major works of the two writers. A knowledge of Russian is not required. PROFESSOR HARKINS. M W F 12.

[V1229x. Russian Drama and Theatre.

Not given in 1970-71.]

§V3333x, V3334y. Introduction to Russian Literature.

Emphasis on reading and literary analysis. Close study of representative works of Russian literature from Pushkin to the modern period. Conducted mainly in Russian. Examinations in English. Prerequisite: a grade of B— or better in Course 4 or permission of the instructor. Professor Ledkovsky. M W F 10.

V3454y. Russian Thought in the Nineteenth and Twentieth Centuries.

Selected texts from representative Russian thinkers, including Khomiakov, Belinsky, Herzen, Bakunin, Chernyshevsky, Leontiev, Danilevsky, Plekhanov, Berdyaev, Trotsky, and others. Special attention will be paid to Russian critiques of Western civilization. Prerequisite: Russian V3334y or permission of the instructor. Professor Gustafson. M W F 1:10.

§V3461y. Pushkin.

A close study, in the original, of Pushkin's narrative, dramatic, and lyrical verse. Conducted mainly in Russian. Examinations in English. Prerequisite: three years of Russian or permission of the instructor. Professor Ledkovsky. M W F 11.

[V3462y. Gogol.

Not given in 1970-71.]

§V3463x. Tolstoy.

A close reading, in the original, of Tolstoy's shorter fiction. Some attention will be paid to the development of his moral and aesthetic ideas. Prerequisite: three years of Russian or permission of the instructor. Professor Gustafson. M W F 1:10.

[V3464x. Dostoevsky.

Not given in 1970-71.]

[§V3467y. Twentieth-Century Prose Writers.

Not given in 1970-71.]

PROFESSOR MAGUIRE.

§W3867x. Readings in Russian Poetry.

Extensive readings in Russian poetry from the second half of the eighteenth century to the present. Conducted partly in Russian. Prerequisite: three years of Russian or permission of the instructor. MISS RASKIN. M F 4:10-5:25.

V3595x, V3596y. Seminar.

Supervised individual research, culminating in a critical paper. The second term may be taken without the first. Prerequisite: senior standing and permission of the instructor. Professor Maguire. First meeting (x and y.) Th 3:10.

GRADUATE COURSES

Certain graduate courses given at Columbia University are open to qualified majors with the consent of the instructor and the major adviser. A description of these courses will be found in the Bulletin of the Graduate School of Arts and Sciences.

G4015x. Highlights of Russian Drama from the Eighteenth Century to Chekhov.

Professor Segel. Tu 2:10-4.

G4016y. Twentieth-Century Russian Drama and Theater. Professor Segel. Tu 2:10-4.

G4103x. History of the Russian Language: Introductory Course.
PROFESSOR UNBEGAUN. F 2:10-4.

G6204x. Turgenev.

Professor Ledkovsky. M W 12:10.

G8010x. Studies in Russian Ninteenth-Century Lyric Poetry. Professor Gustafson. Th 2:10-4.

SOCIOLOGY

PROFESSOR: BERNARD BARBER (Chairman; 410E Milbank Hall)

ASSOCIATE PROFESSOR: GLADYS MEYER1

ASSISTANT PROFESSORS: EILEEN GOLDWYN, ETHNA LEHMAN, PAUL

RITTERBAND

INSTRUCTOR: DANIEL SULLIVAN

LECTURER: JOAN SCHILT

RESEARCH ASSOCIATES: JOHN LALLY, JULIA MAKARUSHKA

Sociology introduces students to the scientific study of society. The basic problems common to all human societies and the varied institutional solutions to these problems make up one large area of sociological interest; hence the sociological study of the family, social class, economic and political institutions, religion, science, ideology, etc. The study of rural and urban communities, human relations in groups, social structure and personality are other areas of sociological interest. So also is the understanding of social change. Sociology is concerned not only with the normal functioning of social institutions but also with social problems such as racial and minority problems, industrial conflict, crime, and other areas of social disorganization. In studying these subjects, materials about American society are given primary emphasis. However, comparative materials from other societies, preliterate and more highly developed, are extensively used. Finally, sociology seeks to acquaint students with its methods of investigation, from which students can learn important facts about scientific method in general. A student majoring in sociology will be required to take: Course 1, 2 (preferably in the freshman year); 41 and 43 (both no later than fall of the junior year); 87-88 (in the senior year); and other courses selected in consultation with the major adviser.

There is no major examination. To graduate, a student must complete, to the satisfaction of her instructor in Soc. 87-88 and one other member of the Department, a long paper involving some form of sociological research and analysis.

1, 2. Introduction to Sociology.

[6]

An introduction to sociological analysis with comparative materials from contemporary American and other societies. Autumn Term: Alternative models of sociological analysis. Major structures of society: kinship, socialization, stratification, formal and informal organization. Spring Term: Major structures of society continued: polity, economy, religion. Selected problems of social deviance and social control. Race and ethnic relations. Problems of social change. These courses must be taken in sequence, but not necessarily in the same year. Professor Lehman and Mr. Sullivan. Tu Th 11-11:50, and one additional hour F at 9, 10, 11, or 2:10.

¹ Absent on leave, 1970-71.

[21. Poverty and the State.

Not given in 1970-71.]

PROFESSOR MEYER.

22. Introduction to Social Work.

[0]

The growth of the profession. Intellectual influences which have shaped its development. The traditional fields of practice. The structure and function of voluntary agencies. Open to juniors and seniors. Prerequisite: two courses in social science other than history. Field work or a paper is required. MISS SCHILT. M 2-4.

32. The Family

[9]

Kinship structures and processes in a cross-cultural perspective. Topics included: comparative kinship structures in selected contemporary and historical societies; kinship and socialization; the relations between kinship structure and other institutions (economy, polity, religion, stratification); kinship and social change; selected problems of kinship structures (divorce, desertion, illegitimacy). Prerequisite: Course 1, 2. Professor Lehman. Tu Th 2:10-3:25.

33. The Community.

[2]

Analysis of variant forms of community structure. Evaluation of classical and current community research. Problems of community power and policy. Professor Goldwyn. M W F 10.

[34. American Minorities.

Not given in 1970-71.]

Professor Meyer.

36. Social Deviance.

[2]

Various theoretical perspectives on the nature of deviance and social control. The analysis of selected contemporary problems, seen within the context of the wider society. Prerequisite: Course 1, 2. PROFESSOR GOLDWYN. M W F 10.

[39. Comparative Social Institutions.

Not given in 1970-71.]

PROFESSOR BARBER.

[40. Social Stratification.

Not given in 1970-71.]

PROFESSOR BARBER.

41. Sociological Theory.

[3]

Systematic, historical and sociological analysis of sociological theory with reference to the work of such major figures as Comte, Marx, Spencer, Sumner, Cooley, Durkheim, Weber, Simmel, Mannheim, Sorokin, Parsons, Merton and others. Prerequisite: Course 1, 2. Professor Barber. M, W 11, and individual conferences.

42. Colloquium in Sociological Theory.

[13]

An intensive and broadened continuation of Course 41. Prerequisite: Course 41. Mr. Sullivan. Tu 2-4, and individual conferences.

43. Introduction to Sociological Research.

[7]

The logic of social research: theories and their functions in inquiry; sociological concepts, their definition and measurement; criteria for

evaluating claims to knowledge of social phenomena. The conduct of inquiry: conceptualization and the formulation of hypotheses; procedures and presuppositions of various research methods; observational procedures and problems of objectivity; the design of research and problems of causal inference. Various technical procedures: sampling designs and the selection of cases; methods of recording and processing data and the control of error; concept-indicator relations and indexconstruction; analysis of qualitative materials; methods of analyzing quantitative data. Prerequisite: Course 1, 2. Professor Ritterband. Tu Th 10:35-11:50.

44. Colloquium in Research Design and Analysis.

[8]

Detailed examination of several empirical studies in terms of methodologies employed and methodological problems encountered. Special attention given to concept-indicator relations, principles of multi-variate analysis, and problems of causal inference. Prerequisite: Course 43. Professor Ritterband. Tu 10-12, and individual conferences.

46. Social Structure and Personality.

[4]

Critical examination of the theory and research studies dealing with relations between social structure and personality. Prerequisite: Course 1, 2. Professor Goldwyn. M W F 1:10.

47. Social Movements.

[4]

Various types of social movements, their organization, ideologies and relationship to social change. Social-psychological bases of participation. Substantive materials drawn from historical sources and current developments in the United States. Prerequisite: Course 1, 2. Professor Goldwyn. M W F 1:10.

48. Black Americans in the Twentieth Century.

Patterns of interaction between black Americans and white society from the founding of the NAACP to the death of Martin Luther King. Term paper required. Guest lecturers. Not open to freshmen. Instructor and time to be announced.

87-88. Individual Projects for Seniors.

[0]

Groups of 5-10 seniors will be assigned to instructors who will supervise the writing of long papers involving some form of sociological research and analysis. Apply to the Chairman for assignment. Section A: PROFESSOR LEHMAN. Section B:- PROFESSOR GOLDWYN.

97. Senior Seminar.

[0]

Problems of higher education: readings and research in the development and structures of higher education in several countries. Special attention to governance of universities, innovation in curricula, and academic manpower. Professor Ritterband. T 2-4, and individual conferences.

COURSES IN OTHER DIVISIONS OF THE UNIVERSITY

The following Columbia courses in areas not offered at Barnard College are open to qualified juniors and seniors:

C3666x. Political Sociology. Professor

C3210. Social Stratification. PROFESSOR ATKINSON.

W3265. Minorities in American Life. PROFESSOR ATKINSON.

C3333. Sociology of Science. Professor Cole.

C3413. Cultural Assumptions and Interactions. Mr. WULBERT.

G4072y. Sociology of Religion. PROFESSOR RITTERBAND

SPANISH

PROFESSOR: MARGARITA UCELAY

ASSOCIATE PROFESSOR: MIRELLA DE SERVODIDIO (Chairman; 208 Milbank

Hall)

ASSISTANT PROFESSOR: MARIA DE ORTI

INSTRUCTORS: LAMBERTO CANO, LUZ CASTANOS, RANDOLPH POPE

A major in Spanish is designed to enable the student to understand, speak, and write the language with ease, have a general knowledge of the history and cultural development of Spain and the Spanish-American world, with a more profound knowledge of the literature and art of Spain and the Hispanic Republics.

A student majoring in Spanish will be required to take Courses 13, 14; 17, 18; 20; 23; 25, 26; 31, 32.

Other fields: The following courses are recommended: Anthropology V3029y; Classical Literature 32x; Art History 31, 75, 76, 88; French 21-22; German 55; 56; Italian V3333x-V3334y; Philosophy 1; Religion V1101x. A major in Spanish must broaden her study of Spanish culture by relating it to other cultures which have influenced it or been influenced by it.

The major examination consists of a three-hour written examination on Spanish literature; a three-hour written examination on Hispanic civilization and Spanish-American literature; and a half-hour oral examination on literature and culture. All examinations are conducted in Spanish.

FOREIGN LANGUAGE REQUIREMENT FOR THE DEGREE: Freshmen who have had prior training in Spanish and who wish to satisfy the foreign language requirement in Spanish will be placed in the appropriate language courses on the basis of their CEEB scores, or, if such are not available, on the basis of proficiency tests taken before registration. Students having a sufficiently high score will automatically fulfill the requirement. All others may do so by completing course 4. Transfer students should consult the department.

LANGUAGE COURSES

1-2. Elementary Full-Year Course.

[16]

Grammar, reading, conversation. May not be taken parallel to elementary Italian. Laboratory work is required. Mr. Cano and MISS CASTANOS. Section I M Tu W Th F 9. Section II M Tu W Th F 2:10.

2x. Intensive Review of Elementary Spanish.

[3]

A course for incoming students whose score on the placement test puts them between the beginning and intermediate level. Also intended for students of Spanish-American background who have some speaking knowledge of Spanish but insufficient formal training or grammatical foundation. Laboratory work is required. MISS CASTANOS. M Tu W F 11.

3, 4. Intermediate Course.

[16]

A rapid review of grammar and syntax, conversation, and reading, discussion and analysis of important works in Spanish and Spanish-American literatures. Monthly book reports on outside reading. Mr. Cano, Professor Orti and Miss Castanos. Section I M W F 10. Section II M W F 11. Section III M W F 1:10.

3y. Intermediate Course, Part I.

[3]

Equivalent to Course 3, but given in the Spring Term. MISS CASTANOS. M W F 11.

4x. Intermediate Course, Part II.

[3]

Equivalent to Course 4, but given in the Autumn Term. Mr. Cano. M W F 11.

5. Spanish through Literary Analysis.

[3]

Readings in twentieth-century works as a basis for improving the comprehension of written and spoken Spanish. Special emphasis on syntax and translation. Weekly compositions. Prerequisite: Course 4 or 4x. Mr. Pope. •M W F 11.

6. Problems of Spanish Grammar.

[3]

Morphology and syntax. Traditional and structural approach. Theory, practice and field work. Analysis and discussion of special problems relating to Spanish as spoken in New York City. Prerequisite: Satisfaction of the foreign language requirement in Spanish. Mr. Pope. M W F 11:00.

7, 8. Intermediate Oral Spanish.

[5]

A study of spoken Spanish, of differences of pronunciation in Spain and America. A consideration of phonetic problems. Conversation, oral drill, laboratory and field work. Prerequisite: Permission of the Department. Mr. Pope. M W F 2:10.

V1521x, V1522y. Advanced Oral Spanish.

[7]

Oral practice through discussion and analysis of contemporary Spanish writers. Prerequisite: Permission of the Department. Mr. Cano. Tu Th 10:35-11:50.

LITERATURE COURSES1

For nonmajors courses marked thus § will count toward the general college requirement.

§11. Significant Themes of Contemporary Latin American Literature. [2] Literature of social protest; the metaphysical fantasy of Jorge Luis Borges; Black or Afro-Antilian poetry; the Superrealist novel; the generation of 1950. Prerequisite: Satisfaction of language requirement. Professor Orti. M W F 10.

¹ All courses are conducted entirely in Spanish except Course 12.

12. Contemporary Latin-American Narrative.

[7]

Reading and discussions of major works by Asturias, Borges, Fuentes, Cortazar, Garcia Marquez, Rulfo and Vargas Llosa. Special emphasis on the social and structural problems involved. No knowledge of Spanish is required. Professor Servodidio. Tu Th 10:35-11:50.

13. The Culture of Spain.

[2]

The history and culture of Spain. A study of the origins and evolution of Spanish character, tradition, and thought. The interrelationship of its history and arts and the scope of its contribution to Western culture. Lectures and monthly book reports. The use of audio-visual materials will be stressed. Prerequisite: Courses 3, 4, or 5. Professor UCELAY. M W F 10.

14. Spanish-American Culture.

[7]

The history and culture of Spanish America. A study of the origins and evolution of the Spanish-American character, tradition, and thought. The interrelationship of its history and arts. Lectures and monthly book reports. The use of audio-visual materials will be stressed. Prerequisite: Courses 3, 4, or 5. Mr. Pope. Tu Th 10:35-11:50.

§15-16. Introduction to Spanish Literature.

[4]

Lectures on the history of Spanish literature, reading, reports, and discussion of the outstanding works and authors up to the twentieth century. Not open to majors. This course is not divisible under any circumstances. Prerequisite: Courses 3, 4, or 5. Professor Orti. M W F 1:10.

\$17. Spanish Literature in the Middle Ages and the Renaissance.

Spanish literature from its origins to the end of the Renaissance. Monthly book reports on novels or dramas. Intended for students majoring in Spanish and nonmajors fluent in the language. Open also to qualified students on written permission of the instructor. Not open to those who have taken Course 15-16. Prerequisite: Courses 3, 4, or 5, 6. Professor Servodidio. Tu Th 10:35-11:50.

§18. Spanish Literature from the Golden Age to the Enlightenment.

Lectures, reading and discussion. Monthly written reports. Intended for students majoring in Spanish and nonmajors fluent in the language. Open also to qualified students on written permission of the instructor. Not open to those who have taken Course 15-16. Prerequisite: Courses 3, 4, or 5, 6, or 17. Professor Ucelay. M W F 2:10.

§20. Don Quijote.

[4]

Lectures, reading, and discussion. Monthly book reports on the outstanding critics of Cervantes' masterpiece. Prerequisite: Courses 15-16, 17, 18 or written permission of the instructor. Professor Ucelay. M W F 1:10.

The Spanish Drama.

[3]

Characteristics and development of the Spanish theater from its medieval antecedents to our days. One term paper. Prerequisite: Courses

15-16 or 17, 18, or written permission of the department. PROFESSOR UCELAY. M W F 11.

§23. Nineteenth Century Literature in Spain.

[5]

Romantic drama and poetry; the realistic novel. A term paper on Galdos. Prerequisite: Courses 15-16 or 17, 18, or written permission of the department. Professor Ucelay. M W F 2:10.

§25. Contemporary Spanish Literature, Part I.

[3]

Characteristics, technique, and style of the writers of the generation of '98 from Unamuno to Ortega y Gasset. (Baroja, Valle-Inclan, Azorin, Benavente, A. Machado, Juan Ramon Jimenez will be specifically studied.) One term paper. Prerequisite: Courses 15-16 or 17, 18 or written permission of the instructor. Professor Ucelay. M W F 11.

§26. Contemporary Spanish Literature, Part II.

[2]

The ideas, trends, and new literary concepts from Garcia Lorca and the generation of '27 to the present day writers. One term paper. Prerequisite: Courses 15-16 or 17, 18 or written permission of the instructor. Professor Orti. M W F 10.

§31-32. Spanish-American Literature.

Lectures and study of the main literary works up to the present time. Book reports on the principal novels. The course is not divisible under any circumstances. Prerequisite: Courses 13, 14, 15-16, 17, 18, or written permission of the department. Autumn Term: MR. POPE. M W F 1:10 [4]. Spring Term: PROFESSOR SERVODIDIO. Tu Th 2:10-3:25 [9].

33. Senior Seminar.

[0]

Intended to supplement or coordinate the work done in other courses and to introduce the student to the methods of scholarly research. Open only to seniors. Professor Servodidio. Tu Th 2:10-3:25.

C3811x-C3812y. Latin-American Seminar.

A seminar which examines the mainsprings of civilization and cultural change in Latin America. Designed for senior majors in Latin-American areas. Professor de Morelos.

VIII. Professional Schools

Professional and graduate training is available at various Schools in Columbia University. Barnard College keeps in close touch with the Schools and advice concerning them may be obtained from class and major advisers.

The requirements for admission vary. In some instances a Bachelor's degree is essential; in others a student is eligible after two or three years of college study. Since only a limited number of students can be accommodated, the Office of University Admissions selects the most promising applicants. For information regarding current regulations, the student should consult the Bulletin of the particular school, which may be obtained from the Secretary of Columbia University. General information concerning admission requirements of specific professional schools and certain graduate programs follows.

SCHOOLS REQUIRING THE BACHELOR'S DEGREE

BUSINESS

The Graduate School of Business offers a four-term course of study leading to the degree of Master of Business Administration. The School operates on a nonmandatory trimester academic schedule, thereby making possible the completion of the program in 16 months. Advanced studies lead to the degree of Doctor of Philosophy.

The School has available, through its several programs of student aid, the means to assist all those who require marginal help to carry a full program of daytime classes. Applications for the degree programs are accepted from students who are able to take advantage of continuous study on a full-time basis and who have earned the baccalaureate or its equivalent.

A limited number of special students with unique and appropriate qualifications are admitted for study without degree credit after an interview with the Assistant Dean.

INTERNATIONAL AFFAIRS AND REGIONAL INSTITUTES

The purpose of the School of International Affairs is to provide a course of instruction which will equip a limited number of students for staff and administrative posts in international affairs. Emphasis is upon the acquisition of an adequate knowledge and understanding of the field generally, and a specialized knowledge of one area of the world. The degree of Master of International Affairs will be awarded upon the satisfactory completion of the two-year course.

The basic requirements for admission are a superior undergraduate record and a Bachelor's degree from an approved institution. Students in the School of International Affairs as well as in other graduate departments of the University may elect to take an area concentration in one of the several area institutes: East

Asian Institute, Near and Middle East Institute, the Institute on East Central Europe, Russian Institute, European Institute, the Institute of African Studies, the Institute of Latin American Studies, and the Southern Asia Institute.

Further information may be obtained from the Office of University Admissions.

JOURNALISM

The Graduate School of Journalism offers a one-year course leading to the degree of Master of Science. A Bachelor's degree is required for admission to this school. Undergraduate work should, wherever possible, include courses in English composition, government of the United States, history since 1914, economics, and sociology.

LAW

The School of Law offers a three-year course of study leading to the degree of Bachelor of Laws. Although there is no required prelaw curriculum, students are advised to take courses in English, American political history, English political and constitutional history, economics, and in logic or philosophy or both.

Admission is on a competitive basis. All applicants are required to take an aptitude test. This test will be given in many locations throughout the United States several times during the academic year. For further information write to the Educational Testing Service, Princeton, New Jersey 08540.

LIBRARY SERVICE

The School of Library Service offers a year of graduate study leading to a Master of Science degree. Basic professional training is provided for work in college and university, school, public, and special libraries. Individuals with the requisite backgrounds and interests may be admitted to "special programs" in such fields as music, law, medicine, business and economics, science, art, and theology.

Candidates for admission should have a Bachelor's degree in liberal arts. An aptitude test and two years' study of a modern foreign language on the college level are among the requirements for admission.

Advanced study leading to the Doctor of Library Science degree is also offered.

PUBLIC HEALTH AND ADMINISTRATIVE MEDICINE

The Faculty of Medicine offers programs of professional study at the School of Public Health and Administrative Medicine leading to a Master of Science degree in Administrative Medicine, Biostatistics, Hospital Administration, Nutrition, and Parasitology. A Bachelor's degree from an approved college and evidence of satisfactory scientific training are necessary for admission. All

PROFESSIONAL SCHOOLS

candidates must spend at least one academic year at the school. An administrative residency of one calendar year's duration is required of all hospital administration students. A calendar year of administrative residency, or an equivalent experience, is required of all candidates for the degree in administrative medicine.

SCHOOL OF THE ARTS

The School of the Arts offers to graduates with a Bachelor's degree from Columbia University, or from another institution of acceptable standing, a course of study leading to the degree of Master of Fine Arts (in painting, and sculpture, a minimum of three semesters, and in theater, film, radio, television and writing, a minimum of two years).

A bulletin describing these graduate courses, and also undergraduate courses, is available at the Office of Admissions, School of the Arts, 440 West 110th Street, New York, N. Y. 10025.

SOCIAL WORK

The Columbia University School of Social Work offers a two-year course of study leading to the degree of Master of Science. An advanced curriculum leading to the degree of Doctor of Social Welfare is offered to graduates of schools of social work.

The School is an accredited member of the Council on Social Work Education. The curriculum includes a sequence of background and methods courses, supervised field work in social work agencies, and research to prepare students for professional practice in social work. A Bachelor's degree is required for admission. The undergraduate program of study must include a minimum of sixteen courses of liberal arts studies, with the emphasis in the direction of the social sciences.

Admission is on a selective basis. The announcement, giving information about the curriculum and dates for making application, may be obtained from the Director of Admissions, 2 East 91st Street, New York, N. Y. 10028.

TEACHERS COLLEGE

Teachers College, the University's Graduate School of Education, offers a variety of programs for advanced study in education and allied fields.

In addition to preparing teachers at the elementary and secondary levels, Teachers College also offers qualified students the opportunity to pursue studies in college teaching, administration, guidance, international education, and psychology.

For guidance in seeking admission and additional information regarding programs of study, consult the Director of the Barnard Education Program or call the Director of Internships, Teachers College: telephone 870-4445.

UNION THEOLOGICAL SEMINARY

Union Theological Seminary offers courses of study leading to the degrees of Bachelor of Divinity, Master of Religious Education, Master of Arts in the fields of Christian Education, Biblical Literature, and Comparative Religions, and Master of Sacred Music.

A Bachelor's degree is required for admission. Those applicants are selected who in the light of expressed purpose, personality, and record of scholarship give especial promise of usefulness in some form of Christian ministry.

The Seminary also participates in joint programs leading to the degrees of Master of Arts and Doctor of Philosophy in the field of religion at Columbia University.

Further information may be obtained from the Office of the Registrar, 3041 Broadway, New York, N.Y. 10027.

SCHOOLS NOT REQUIRING THE BACHELOR'S DEGREE

Admission may be gained to the following professional schools without a Bachelor's degree.

ARCHITECTURE

The School of Architecture offers courses of study leading to the degree of Bachelor of Architecture. Under normal conditions, the degree may be obtained in four years.

The minimum course requirement for admission to the School is completion of 16 courses, including the following: English composition and literature, a foreign language (preferably French or German), mathematics through differential and integral calculus, physics, European history, and either economics, government, or sociology. The courses are described in detail in the Bulletin of the School of Architecture. A copy may be obtained from the Office of Architecture Admissions. Preference is given to applicants who hold an undergraduate degree.

DENTAL HYGIENE

A two-year course for dental hygienists is offered at the School of Dental and Oral Surgery, leading to the Bachelor of Science degree in Dental Hygiene. The minimum requirement for admission is two years of college work. The preparatory work at Barnard should include the satisfactory completion of courses in English, chemistry, sociology, and psychology.

This profession is controlled by state law and licensing examination. Graduates are qualified as dental hygiene teachers and public health dental hygienists.

Scholarship aid is available.

PROFESSIONAL SCHOOLS

DENTAL AND ORAL SURGERY

The School of Dental and Oral Surgery offers a four-year course of study leading to the degree of Doctor of Dental Surgery. The preparatory work at Barnard should comprise a minimum of two courses each in English composition and literature, physics, biological sciences, inorganic chemistry, and organic chemistry. The Admissions Committee of the School of Dental and Oral Surgery will consider carefully the entire predental record and select the most promising candidates. The minimum requirement for admission is three years of college work.

Scholarship aid for women is available.

ENGINEERING AND APPLIED SCIENCE

The School of Engineering and Applied Science offers undergraduate programs in the professional branches of engineering and in the applied sciences.

The first three years of the five-year program leading to the degrees of Bachelor of Arts and Bachelor of Science are spent under the jurisdiction of Barnard College, and a minimum of courses is taken in the engineering school. After successful completion of the first three years' work, the student applies for admission to the School of Engineering and Applied Science, where the remaining two years of more specialized engineering study are taken.

Although the above plan is educationally desirable, it is possible in some cases for the exceptional student to complete the prescribed subjects with two years in Barnard College and two years in the School of Engineering and Applied Science. This program leads only to the degree of Bachelor of Science.

Students interested in engineering or applied science should offer at entrance to Barnard mathematics through trigonometry, physics, and, if possible, chemistry, in addition to the general admission requirements. For details the Office of Admissions of the School of Engineering and Applied Science should be consulted.

Further information about the engineering program and the advanced degrees may be obtained from the Bulletin of the School.

MEDICINE

The College of Physicians and Surgeons offers a four-year course of study leading to the degree of Doctor of Medicine. The preparatory work at Barnard must include the requirements as follows: at least one academic year of English, physics, biological sciences, general chemistry, and organic chemistry.

Before admission to the medical school, the entire premedical record of each applicant is carefully examined in order that those who are adjudged the most promising candidates for the profession may be selected. While the

minimum requirement for admission is three full academic years of college work, the complete college course of four years is considered the most desirable preparation.

NURSING

Columbia University offers a course in professional nursing leading to the degree of Bachelor of Science. The program is conducted on the Medical Center campus. The minimum requirement for admission is two years of college work. The program covers two academic years and two summer sessions. A special program is offered for students who hold a Bachelor's degree. This program is two academic years and one summer session in length. Preparatory work should comprise courses in chemistry, biological sciences, psychology, and sociology. Acceptance of a candidate is based on grounds of character and health as well as fulfillment of the academic requirements.

OCCUPATIONAL THERAPY

The Faculty of Medicine offers a program of professional study in occupational therapy leading to a Bachelor of Science degree. Two years of acceptable college work are required for admission, with courses in biology, English composition, psychology, and in sociology. The course of study is of 25 months' duration including two academic years and nine months of clinical experience.

A graduate program of 17 months is offered for students already possessing a Bachelor of Arts or Science degree. The applicant must meet specific prerequisites in biological sciences, psychology and sociology. On satisfactory completion of the program of one academic year and nine months of clinical experience, the Faculty of Medicine awards a certificate.

PHYSICAL THERAPY

The Faculty of Medicine offers a program of professional study in physical therapy which leads to the Bachelor of Science degree. The candidate for admission must present two years of acceptable college work, including courses in biological sciences, physics, English, and psychology. Requirements for admission to the licensure examination for physical therapists in the State of New York include two courses each in biology, chemistry, and physics. Students who plan to practice in New York State should accordingly fulfill the remainder of these requirements.

The course of professional study covers 21 calendar months, including two academic years of didactic instruction and clinical practice, and a two-month clerkship following the junior year of study.

A graduate program of one calendar year is offered for students already possessing a Bachelor of Arts or Bachelor of Science degree, depending on previous preparation in biological science, physics, English, and social science. The Faculty of Medicine awards a certificate upon satisfactory completion of this course.

IX. Fees

Barnard does not charge its students the full cost of their instruction, since its Trustees believe that admission to college should be based on intellectual ability and promise rather than financial resources. Student payments meet only two-thirds of the total educational expense; the balance must be obtained each year from investment income and from gifts of the Associate Alumnae and other friends of the College. By continuous efforts to increase annual gifts and endowment, and by economy of operation, the College keeps charges as low as possible without sacrificing the quality of its instruction.

SUMMARY OF FEES

I.		Each Term	Academic Year
	commuter students		
	Tuition and fees1.3	\$1,150.00	\$2,300.00
II.	Full-time resident students		
	Tuition and fees1,3	\$1,150.00	\$2,300.00
	Residence fees ²	562.50	1,125.00
	Total	\$1,712.50	\$3,425.00

III. Other students

All students taking less than a full schedule (that is, less than three courses) are required to pay the registration (\$10), health service (\$15), and Undergraduate Association activity (\$10) fees each term, as well as \$280 per course for all academic work and \$5 for physical education, if this is required.

Students registering in absentia for one term or for one year are required to pay a registration fee of \$15.

IV. Deposits

All students: In order to obtain a place on the college roll for the ensuing academic year, students who are currently enrolled must pay a deposit of \$100 toward tuition and fee charges on or before May 15. Applicants for admission will be billed for the deposit at the time they signify their acceptance of admission to the College. One-half

¹ Includes registration, health service, and Undergraduate Association activity fees.

² Residents of Brooks, Hewitt, and Helen Reid Halls, \$562.50 each term, including room, board, and laundry.

Residents of 616 West 116th Street and 620 West 116th Street, \$337.50 each term, including room and laundry.

Residents of Plimpton Hall, \$362.50 each term, including room and laundry. For nonresidents and commuters, board available on campus at \$250 per term.

³ Freshmen and transfers pay an orientation fee of \$10 for the Autumn Term in which they enter.

of this deposit (\$50) will be applied to the charges of the Autumn Term and the remainder to the charges of the Spring Term. The deposit toward the term's charges is forfeited unless the Bursar is notified of a change in plans no later than August 1 for the Autumn Term or December 1 for the Spring Term.

Resident students and nonresidents who pay housing fees through the College: a room deposit of \$50 is payable by May 15 to secure the assignment of a room for the following academic year. One-half of this deposit (\$25) will be applied to the charges of the Autumn Term and the remainder to the charges of the Spring Term. The deposit toward the term's charges is forfeited unless the Bursar is notified of a change in plans no later than August 3 for the Autumn Term or December 1 for the Spring Term.

V. Payment of Charges and Fees

All charges and fees are payable semiannually, in advance. No reduction is made for late registration. Registration is not complete until all charges and fees are paid. Failure to complete registration (including the payment of all charges and fees) on time imposes automatically the statutory charge of \$15 for late registration.

Payment of charges and fees (accompanied by copy of the bill) must be made by September 1 for the Autumn Term and by January 15 for the Spring Term. If payments are mailed, envelopes must be postmarked not later than September 1 or January 15 respectively. Students admitted for the Autumn Term after September 1 must pay their bills before the first day of registration. A late payment fee of \$15 will be charged on all payments made or postmarked after midnight on the above dates.

Rooms will not be held for students whose total bills are not paid by September 1.

All charges and fees are subject to change at any time at the discretion of the Trustees.

The privileges of the College, including examinations, are not available to any student who is delinquent in the payment of charges or fees. When bills are not paid by their due date or satisfactory arrangements for their payment are not made with the Bursar, the student will be required to withdraw from the College. Financial obligations include not only tuition, fees, and residence charges (if any) but fines due the libraries and other charges which may be incurred.

Checks or money orders in payment of all charges and fees must be in U.S. funds (at a U.S. bank) payable to Barnard College. Checks or money orders should be made out for the exact amount of the payment due.

(The application fee of \$15, payable when application for admission is filed, is not credited on the bill and is never refunded.)

NOTE: Holders of a New York State Regents Scholarship and/or Scholar Incentive Award may deduct the amount shown on their Award Certificate provided the award certificate is enclosed with the bill.

VI. Deferred Payment

Many parents prefer to meet academic expenses out of monthly income, rather than in large cash payments. To these parents, we are making available the services of Education Funds, Inc., 10 Dorrance Street, Providence, R. I. 02901. It is a national organization specializing in education financing. Information concerning the plans will be sent to all parents in the spring of 1970.

The College will also accept payment made through any bank or trust company or recognized financing agency provided payments are made on or before September 1 for the Autumn Term or January 15 for the Spring Term.

VII. Adjustment of Fees and Refunds

For changing program of study: If a student changes her program and the tuition called for is lower than the amount she has already paid, she will be refunded the excess only if the alteration in her program was made by October 2 in the Autumn Term and by February 12 in the Spring Term. If the new program calls for higher tuition, the student must pay the difference at the time she registers the program change.

For withdrawal: If a student withdraws from College after August 3 for the Autumn Term and December 1 for the Spring Term, the following amount of tuition and residence fees paid will always be retained:

Tuition and fees \$50.00 Residence fees 25.00

Up to and including the first Friday of the term (see the Academic Calendar), the remaining tuition, \$1,100, which the student has paid will be refunded in full. After the first Friday of the term, twenty per cent of the remaining tuition, \$220, will be retained by the College for each additional week, or part of a week, of the semester up to the date on which the student's written notice of withdrawal from the College is received by the Office of the Dean of Studies.

Up to and including the first Friday of the term (see the Academic Calendar), the remaining residence fees that the student has paid will be refunded in full. After the first Friday of the term, ten per cent of the remaining residence fees will be retained by the College for each week, or part of a week, up to the date on which the student's written notice of withdrawal from the College is received by the Office of the Dean of Studies.

A resident student who moves from the residence halls while still a student in the College will forfeit all residence fee payments.

If a student has made only partial payment on her tuition or room and board, the amount of unpaid balance for each will be deducted from any withdrawal credit that is allowed. If the unpaid balance is larger than the credit allowed, the student must pay the difference.

Refunds: No refunds for board will be made for students who wish to take meals off-campus. Barnard is nondenominational and no provision can be made for special diets.

VIII. Additional Charges

Orientation fee: Required of all students entering Barnard College for the first time in September	\$10.00
Tuition for technical courses in art history: See Announcement of the School of the Arts for special fees.	
Deferred and special examinations, payable in each case before the examination is held:	
For each deferred examination	5.00
For each special examination	10.00
(A special or deferred examination is one taken at any time other than the conclusion of a course.)	
Late registration for academic work and/or physical education (see pages 38 and 158)	15.00
Late filing of:	
Tentative program cards	10.00
Application for deferred examinations	5.00
Application for language placement test	5.00

Chemistry breakage fee:

All breakage in excess of \$10 per course will be billed.

IX. Other Expenses

The following information may be helpful in budgeting expenses not payable to the College: \$23 for a gymnasium costume; a minimum of \$150 per year for textbooks; \$225 to cover weekend meals when the dining hall in Brooks-Hewitt-Reid is closed; for students in "616," "620," and Plimpton approximately \$425 for food; for commuting and nonresident students approximately \$165 for lunches at the College; approximately \$350 for clothing, laundry, recreation and miscellaneous expenses. Individual estimates of expense should also include allowances for transportation for nonresident and commuter students, or two round-trip fares from home to college for resident students.

X. Student Health Service

Campus medical service is available to all Barnard students and is covered by the Health Service fee included in the comprehensive charge payable each term. This service is not available during college vacations.

Medical examinations are required of all freshmen and seniors. (Students are not permitted to register for the succeeding term until the required examination is complete.) The final date for completion of the examination by the College Physician is *December 15* for seniors; May 15 for freshmen.

Students are entitled to the following services:

Barnard College Medical Office

Advice, treatment, and examination by the Barnard College physicians or nurses.

Columbia Health Service or St. Luke's Hospital, upon referral by the Barnard College Physician.

- a. One consultation without charge with any specialist.
- b. Surgical treatment of minor surgical condition.
- c. Laboratory or X-ray studies as indicated.
- d. Ten days a term free care in the Columbia University Infirmary.
- e. Four days of ward care at St. Luke's Hospital for severe acute surgical and medical conditions requiring hospitalization.

The following services are not provided:

Dental care; eye examination, treatment and the fitting and provision of glasses; house calls or room visits; ambulance service; free care for chronic conditions or conditions predating original college matricipalition.

XI. Insurance for Foreign Students

Foreign students who are not residing in the United States with members of their families are required to participate in the Accident and Sickness Insurance Plan. The Accident and Sickness Insurance Plan fee of approximately \$40.20 a calendar year is payable to the American International Life Insurance Co. of New York. Full information concerning this policy will be mailed to the student with her college bill.

XII. Hospital Insurance

All students are eligible for membership in the Associated Hospital-United Medical Service for twelve consecutive months beginning October 1 at a cost of approximately \$78.24. See the Bursar's Office for complete details.

XIII. Safekeeping of Students' Funds

Barnard College is not prepared to receive funds from students for safekeeping nor to cash personal checks or travelers checks.

To cover their immediate expenses, students should provide themselves with travelers checks, which can be cashed at a local bank, or money orders, which the Columbia University Station of the U. S. Post Office will cash upon presentation of the Bursar's receipt. A Bursar's receipt is issued when a student registers at the beginning of each term.

It is also possible to open a checking, special checking, or savings account at one of the local banks:

Chemical Bank Broadway and 113th Street, New York, N. Y. 10025

First National City Bank of New York Broadway and 111th Street, New York, N.Y. 10025

American Savings Bank Broadway and 111th Street, New York, N.Y. 10025

X. Financial Aid

In so far as possible, the College helps qualified students who have financial need. Since the College fees do not cover the entire cost of her education today every student at Barnard in effect receives some financial aid from past donors. The balance is made up by endowment income and gifts. In addition to grants and loans, opportunities for part-time employment are provided to open Barnard's doors to girls of superior talent from all sections of the country. (See Office of Placement and Career Planning, page 47.) Students are urged to investigate federal and state aid programs and college tuition financing plans offered by local banks and insurance companies.

ANNUAL AWARDS

Loans or combination grant-and-loan awards are made by the Committee on Financial Aid to full-time students who have financial need, high scholarly ability, excellent character, and promise of future accomplishment. The College shall be the sole judge of the financial aid to be granted, and may at any time withdraw or discontinue such aid. The amount of the award depends on the student's financial need and is determined from the following:

- 1. The amount of the parents' contribution as estimated from information given on the Parents' Confidential Statement of the College Scholarship Service.
- 2. The amount available from other sources, such as the New York State Regents Scholarships and New York State Scholar Incentive Awards.
- 3. The student's pre-college savings distributed over a five-year period.
- 4. The student's summer savings (\$300 for freshmen, \$400 for sophomores, and \$500 each for juniors and seniors).
- 5. After the freshman year, the student's earnings from part-time work during the academic year (\$250 for sophomores and \$300 each for juniors and seniors).

The basic budget used to compute financial need includes, in addition to the college fees, allowances for other expenses as described on page 202.

Awards are for one year only. Students in good standing are eligible to apply for further assistance in subsequent years.

Applications for financial aid for entering students may be obtained from the Admissions Office and should be returned to that Office on or before January 1. The student applies in terms of financial need, not for any one of the specific scholarships listed in the following pages.

ENTERING STUDENTS: Entering students who are applying for aid must also file a Parents' Confidential Statement with the College Scholarship Service, Box 176, Princeton, New Jersey 08540, or Box 881, Evanston, Illinois 60204, or

Box 1025, Berkeley, California 94701, not later than January 1 of the senior year in high school. Forms may be obtained from the school or they will be sent by the College Scholarship Service on request. The Service acts as a central filing and distributing agent. Photographic copies of the completed statements will be sent to the colleges named by the applicant.

Each applicant must complete and file both forms as instructed above in order to be considered for financial aid. Applicants are notified of awards at the time they receive their notice of admission to the College.

If an entering student applies to more than one college in the Seven College Conference (Barnard, Bryn Mawr, Mount Holyoke, Radcliffe, Smith, Vassar, and Wellesley), her application is reviewed by the appropriate members of the Conference in order that awards may be made on a noncompetitive basis. Amounts vary only according to the difference in fees and, whenever possible, are equivalent in value.

STUDENTS IN COLLEGE: Students in college who are in need of financial aid and are academically qualified must file applications on special forms obtainable in the Financial Aid Office. Applications must be filed on or before February 5, 1971.

Applicants will be notified as soon as awards are made. Recipients are requested to inform the Office of Financial Aid immediately, in writing, of their plans with respect to the funds assigned to them.

NEW YORK STATE SCHOLAR INCENTIVE AWARDS

Any student who has been a legal resident of New York State for the preceding year is entitled to a Scholar Incentive Award (\$50 to \$300) for each term in which she is registered as a full-time degree candidate. The amount of this award is based upon the net taxable balance of her income and the income of those responsible for her support, as reported on the New York State Income Tax Return for the previous year. Application for awards must be made annually and should be filed before July 1 for each academic year, but will be accepted up to December 1. Applications for the Spring Term only have an April 1 deadline. Further information and application forms may be obtained from Regents Examination and Scholarship Center, 800 North Pearl Street, Albany, N. Y. 12204.

NEW YORK REGENTS COLLEGE SCHOLARSHIPS

The Regents of the University of the State of New York award, each year, scholarships to full-time degree candidates who are legal residents of New York State. These awards are based on the Regents Scholarship Examination and are open to students in any approved college or university in the state. Awards range between \$125 to \$500 a term, depending upon need. High school students can get further information from their counselors at school. New York Regents Scholarships are not automatically renewed; they must be reapplied for annually.

LOAN FUNDS

There are various loan funds at Barnard available for assignment to students as a part of their financial aid.

Barnard College Loans

The Associate Alumnae of Barnard College maintain a Student Loan Fund from which loans to seniors are made. In 1950, through a gift of \$26,000 from Mr. and Mrs. Gerard Swope and Miss Henrietta Swope, an additional fund known as the Swope Loan Fund was established. In the spring of 1960, the Barnard College Loan Fund was established by the Board of Trustees to help meet the increased need of students. In 1961, the Pauline Hirschfeld Loan Fund was established with a bequest of \$5,000 from Pauline Steinberg Hirschfeld, '08. In 1966 two new loan funds were established: the Barnard College Club of Cleveland Loan Fund with gifts of \$1,276, to be used with preference for a student from the Northeastern Ohio area; and the Ann Susan Becker Memorial Loan Fund with gifts of \$1,530 from her family; and in 1968 the Adelaide Le Clercq Loan Fund was established with a gift of \$3,000 from Adelaide M. Hart, '06, to be used with preference for a student majoring in music or French.

These funds are administered by the Committee on Financial Aid. Loans are regularly assigned as part of a student's financial aid award. No interest is charged while the student is in college. Payments on principal may be made at any time before graduation. Principal of indebtedness is repaid in semiannual installments of \$150 each after the student ceases to be in full-time attendance at Barnard College. Interest is charged from the first day of the month after the student ceases to be in full-time attendance at Barnard College at the rate of three per cent per annum on the unpaid balance.

The Morris Morgenstern Student Loan Fund of \$5,000 was established in 1959. Interest-free loans not to exceed \$500 are granted upon application to the Financial Aid Office to any deserving undergraduates, other than freshmen, who are in need of temporary emergency assistance. Loans are granted for short terms, no longer than a year from the date of issue.

The Tudor Foundation Student Loan Fund of \$5,000 was established in 1967. Interest-free loans not to exceed \$1,000 in any one academic year are granted upon application to the Financial Aid Office, to mature when the student terminates her connection with the College.

National Defense Student Loan Program

Barnard participates in the National Defense Student Loan Program (Title II of the National Defense Education Act of 1958). A portion of the funds for this Program are granted to the College by the federal government after application by the College; the balance of the funds are contributed by Barnard.

These loans are assigned by the College to students as a part of their financial aid. Special consideration is given to those students who intend to teach in college or in public or private elementary or secondary schools.

State Loans

Legal residents of the State of New York who are degree candidates are eligible to apply for loans guaranteed by the New York Higher Education Assistance Corporation. No interest is charged as long as the student is registered as a full-time student, but interest and repayment of principal must begin when a student ceases to be so registered. Further information and application forms for these loans should be obtained from local banks.

Other states also have loan plans through the Federal Guaranteed Loan Program. Students should inquire at their local banks regarding such loan plans.

BARNARD COLLEGE SCHOLARSHIP FUNDS

A list of scholarship funds established by gifts, endowment, or in trust follows. The income from such funds, both unrestricted and restricted, and from the funds for grants-in-aid is available each year.

UNRESTRICTED1

NIELS J. ALLISON FUND (1964). From the estate of Beatrice C. Allison '12. \$55,229.

ALUMNAE SCHOLARSHIP FUND (1922). A tenth reunion gift by the Class of 1912, subsequently supplemented by legacy from the estate of Julia Ludlow Young and by gifts of other alumnae. Approximately \$15,742.

ANNA E. BARNARD SCHOLARSHIP FUND (1899). In honor of Mrs. John G. Barnard by Emily H. Bourne. \$3,000.

FRANCES E. BELCHER SCHOLARSHIP FUND (1963). By bequest of Miss Frances E. Belcher. \$42,257.

RUTH MARSHALL BILLIKOPF SCHOLARSHIP FUND (1950). In honor of Ruth Marshall Billikopf '19. \$5,000.

VARIAN WHITE BLUMBERG SCHOLARSHIP FUND (1952). From the estate of Varian White Blumberg '13. \$5,000.

CHARLES E. BOGERT MEMORIAL SCHOLARSHIP AND ANNA SHIPPEN YOUNG BOGERT MEMORIAL SCHOLARSHIP FUND (1913). By bequest of Annie P. Burgess. \$10,000.

EVA-LENA MILLER BOOTH SCHOLARSHIP FUND (1932). In memory of Mrs. Eva-Lena Miller Booth, by the New York City Chapter of the Daughters of the American Revolution. \$1,000.

[•]¹ Figures compiled as of January 1, 1970.

BREARLEY SCHOOL SCHOLARSHIP FUND (1889). By pupils and former pupils of the Brearley School. \$3,000.

MARTHA ORNSTEIN BRENNER SCHOLARSHIP FUND (1915). In memory of Martha Ornstein Brenner '99, by her friends. \$4,000.

ARTHUR BROOKS FUND (1897). By Olivia E. Phelps Stokes as a memorial to the Reverend Arthur Brooks, D.D., Rector of the Church of the Incarnation and Chairman of the Board of Trustees of Barnard College during the first six years of its existence. \$5,000.

THOMAS F. CLARK STUDENTS' FUND (1928). By bequest of Mrs. Fanny Foster Clark. \$100,000.

JENNIE B. CLARKSON SCHOLARSHIP FUND (1898). By Mrs. W. R. Clarkson. \$3,000.

CLASS OF 1921 SCHOLARSHIP FUND (1931). A tenth reunion gift by the Class of 1921. \$2,500.

CLASS OF 1954 SCHOLARSHIP FUND (1955). Gifts of the Class of 1954 through their fifth reunion in 1959. \$4,584.

COLLEGE BOWL SCHOLARSHIP FUND (1968). Established with gifts from the General Electric Company, Seventeen Magazine, and Gimbels Department Store, earned by the Barnard College Bowl Team's five successive victories. \$19,500.

VERA B. DAVID SCHOLARSHIPS (1962). Income from the trust established by bequest of Vera B. David in memory of her late husband, John David.

ADA M. DONELLE SCHOLARSHIP FUND (1948). By bequest of Mrs. Ada M. Donelle, \$121,751.

MARGARET JANE FISCHER SCHOLARSHIP FUND (1968). With a gift from Margaret Jane Fischer '35. Awarded annually. \$10,014.

FISKE SCHOLARSHIP FUND (1895). By Mrs. Martha T. Fiske-Collord. \$5,000. GALWAY FUND (1912). By an anonymous donor. \$2,400.

ANITA HYMAN GLICK SCHOLARSHIP FUND (1968). In memory of Anita Hyman Glick '62 by her family and friends. Awarded annually to students who are academically qualified and in need of financial aid. \$10,450.

IRMA ALEXANDER GOLDFRANK FUND (1919). In memory of Irma Alexander Goldfrank '08, by her friends. \$2,106.

GRAHAM SCHOOL SCHOLARSHIP FUND (1907). By the Graham Alumnae Association. \$7,300.

LOUISE H. GREGORY SCHOLARSHIP FUND (1955). From gifts in memory of Louise H. Gregory. \$4,497.

HARKNESS SCHOLARSHIP FUND (1939). With a gift from Edward S. Harkness. \$100,000.

RITA HILBORN HOPF MEMORIAL SCHOLARSHIP FUND (1966). By bequest of Rita Hilborn Hopf '14. \$246,612.

CHARLES EVANS HUGHES SCHOLARSHIP FUND (1952). By bequest of Charles Evans Hughes. \$14,300.

LILY MURRAY JONES SCHOLARSHIP FUND (1950). In memory of Lily Murray Jones '05, Alumnae Trustee from 1939 to 1943, by Murray, Alfred, and Wallace Jones. \$25,146.

MARJORIE LAWRENCE KAUFMAN SCHOLARSHIP FUND (1965). By the Trustees out of funds left to the College by the life income contract of Marjorie Lawrence Kaufman '19. \$24,290.

DR. ANN G. KUTTNER SCHOLARSHIP FUND (1969). By the Trustees, out of funds left to the College by the life income contract and bequest of Dr. Ann G. Kuttner. \$184,015.

AUGUSTA LARNED SCHOLARSHIP FUND (1924). By bequest of Augusta Larned. \$10,000.

MARJORIE HERRMANN LAWRENCE SCHOLARSHIP FUND (1967). In memory of Marjorie Herrmann Lawrence '19. \$16,000.

HARRIETT MOONEY LEVY SCHOLARSHIP FUND (1965). By bequest of Harriett Mooney Levy. \$69,339.

JOAN SPERLING LEWINSON SCHOLARSHIP FUND (1955). With a gift from Joan Sperling Lewinson '13. \$31,000.

JUDITH LEWITTES SCHOLARSHIP FUND (1957). In memory of Judith Lewittes '55, by her family and friends. \$5,724.

ANNE ELIZABETH LINCOLN SCHOLARSHIP FUND (1963). From the estate of Anne Elizabeth Lincoln '24. \$8,441.

AMY LOVEMAN SCHOLARSHIP. See Undergraduate Awards, page 221.

LOUISE GRACE LUBY AND JAMES LUBY SCHOLARSHIP FUND (1947). From the estate of Grace Farrant Luby '93. \$5,000.

CECILE LEHMAN MAYER SCHOLARSHIP FUND (1962). With a gift from Mr. and Mrs. Paul Mazur, the income to be awarded annually for financial aid to the maximum of four or fewer students. \$25,000.

MEMORIAL SCHOLARSHIP FUND (1954). To receive contributions in memory of deceased alumnae and friends. \$37,282.

WILLIAM MOIR SCHOLARSHIP FUND (1912). In memory of William Moir by his wife. \$10,000.

CAROLINE CHURCH MURRAY FUND (1918). In memory of his wife, Caroline Church Murray, by George Welwood Murray. \$5,000.

ANNETTE FLORANCE NATHAN SCHOLARSHIP FUND (1947). From the estate of Frederick Nathan. \$3,000.

DORA R. NEVINS SCHOLARSHIP FUND (1969). In loving memory of Dora R. Nevins by bequest of Nannie R. Nevins. \$12,500.

LUCRETIA PERRY OSBORN SCHOLARSHIP FUND (1940). In memory of Lucretia Perry Osborn, a Trustee of Barnard College from 1893 to 1930, by her family and friends. \$5,000.

JEAN T. PALMER SCHOLARSHIP FUND (1969). Established by gifts of alumnae and other friends, the income to be awarded by the Committee on Financial Aid or its equivalent, to Barnard students with financial need who are in good standing, regardless of their academic averages. \$126,328.

M. GLADYS QUINBY SCHOLARSHIP FUND (1961). By bequest of M. Gladys Quinby '08 and gifts of friends. \$5,000.

EVA RICH SCHOLARSHIP FUND (1968). By bequest of Eva Jacobs Rich '07. \$40,344.

PETER C. RITCHIE, JR. SCHOLARSHIP FUND (1937). By bequest of Virginia J. Ritchie. \$4,436.

EDITH LOWENSTEIN ROSSBACH MEMORIAL SCHOLARSHIP FUND (1950). In memory of Edith Lowenstein Rossbach '19, by her family, friends, and classmates. \$23,304.

EDNA HELLER SACHS SCHOLARSHIP FUND (1955). With a gift from Edna Heller Sachs '10. \$15,250.

ELEANORA BUTLER SANDERS SCHOLARSHIP FUND (1922). By bequest of Henry M. Sanders. \$10,000.

ANNA M. SANDHAM SCHOLARSHIP FUND (1922). By bequest of Anna M. Sandham to Columbia University. \$10,000.

SCHMITT-KANEFENT SCHOLARSHIP FUND (1931). By bequest of Catherine Schmitt. \$7,102.

SCHOLARSHIP FUND (1901). By general subscription through the Scholarship Committee of the Board of Trustees. Approximately \$11,980.

KATHERINE FLINT SHADEK SCHOLARSHIP FUND (1961). By Katherine Flint Shadek '44. \$16,202.

EMILY JAMES SMITH SCHOLARSHIP FUND (1899). In honor of Miss Smith, Dean of Barnard College from 1894 to 1900, by Emily H. Bourne. \$3,000.

GEORGE W. SMITH SCHOLARSHIP FUND (1906). In memory of George W. Smith, a Trustee of Barnard College, by Mrs. Martha T. Fiske-Collord. \$5,000.

EDNA PHILLIPS STERN SCHOLARSHIP FUND (1952). In memory of Edna Phillips Stern '09, by her family and friends. \$20,797.

ISABEL GREENBAUM STONE SCHOLARSHIP FUND (1957). In memory of Isabel Greenbaum Stone '18, by her family. Recipients of these scholarships are urged to repay the amounts they receive as soon as they are in a position to do so. \$16,065.

FANNIE MANWARING STURTEVANT AND DANIEL DWIGHT STURTEVANT SCHOLARSHIP FUND (1969). Established with a bequest from Ethel G. Sturtevant, Assistant Professor of English, retired, the income to be awarded to Barnard students. \$20,000.

SOLON E. SUMMERFIELD FOUNDATION SCHOLARSHIP FUND (1960). Gifts from the Solon E. Summerfield Foundation. \$12,500.

VELTIN SCHOOL SCHOLARSHIP FUND (1905). By the alumnae of Mlle. Veltin's School. \$3,000.

ALMA F. WALLACH SCHOLARSHIP FUND (1951). In memory of Alma F. Wallach from the estate of Richard L. Leo. \$1,000.

ELLA WEED SCHOLARSHIP FUND (1895). In memory of Ella Weed, Chairman of the Academic Committee of the Board of Trustees of Barnard College during the first five years of its existence, by pupils and alumnae of Miss Anne Brown's School. Approximately \$8,602.

HYMEN AND HELEN WERNER SCHOLARSHIP FUND (1964). In memory of Hymen and Helen Werner. Established by Helen Frankfield Werner '06 in 1953 in memory of her husband. Following her death maintained as the Hymen and Helen Werner Scholarship Fund by her daughters, Therese Werner Kohnstamm '33, Laura Werner Wallerstein '36 and Jean Werner Kane '37. \$6,368.

SCHOLARSHIP FUNDS RESTRICTED¹

MARY GERTRUDE EDSON ALDRICH FUND (1916). By Mrs. James Herman Aldrich to assist, in her senior year, a student who has shown in her college life the moral qualities which go to the making of fine womanhood. \$1,000.

BERTHA R. BADANES SCHOLARSHIP FUND (1966). By Bertha R. Badanes '14. For children of New York City school teachers preferably from Brooklyn. If there is no qualified candidate the award may be used for another needy student, preferably from Brooklyn. \$5,000.

BARNARD COLLEGE CLUB OF HOUSTON SCHOLARSHIP FUND (1969). Established until further action of the Board of Trustees with the income to be awarded to students from the Houston area. \$5,000.

BARNARD COLLEGE CLUB OF NEW YORK SCHOLARSHIP FUND (1952). For a Barnard student whose home is outside the area of the City of New York. Approximately \$33,079.

BARNARD-IN-WESTCHESTER ENDOWMENT FUND (1962). By the Barnard College Club of Westchester County. For scholarships, preferably for students from Westchester County. \$14,154.

BARNARD SCHOOL ALUMNAE SCHOLARSHIP FUND (1916). By the alumnae of the Barnard School for Girls. Awarded to a student in any class, preference being given to nominees of the school. \$4,000.

WILLINA BARRICK MEMORIAL SCHOLARSHIP FUND (1936). In memory of Willina Barrick '00, by the College Club of Jersey City. Awarded on the nomination of the Club to a graduate of a Jersey City secondary school. \$10,635.

IRVING BERLIN SCHOLARSHIP FUND (1950). By Irving Berlin. Awarded annually to one or more girls of foreign-born parentage. \$23,500.

IDA BLAIR MEMORIAL FUND (1937). In memory of Ida Blair by the Women's Democratic Union. To be used for the purchase of books for a student, preferably one studying political science. \$700.

¹ Figures compiled as of January 1, 1970.

ALICE MARIE-LOUISE BRETT SCHOLARSHIP FUND (1930). In memory of his daughter, Alice Marie-Louise Brett '15, by bequest of Philip E. Brett. Awarded during her senior year to a student specializing in French. \$10,000.

WILLIAM TENNEY BREWSTER AND ANNA RICHARDS BREWSTER FUND (1961). By bequest of William Tenney Brewster. To be awarded preferably in amounts not less than \$1,000, with priority to daughters of professional people educated in independent schools. \$166,614.

BROOKLYN SCHOLARSHIPS (1895). By the Trustees of Columbia University in recognition of the gift to Columbia University by President Seth Low of a memorial building for the University Library. Open to students residing in Brooklyn and prepared in a Brooklyn school. Twelve at \$150 each.

ANNE BROWN ENDOWMENT SCHOLARSHIP FUND (1939). In memory of Anne Brown, by the Anne Brown Alumnae Association, for young women of the City of New York. Approximately \$31,339.

CARPENTIER RESIDENCE SCHOLARSHIP FUND (1919). By bequest of Horace W. Carpentier. Awarded annually to students who are not residents of New York City or its vicinity. \$200,000.

ELIZA TAYLOR CHISHOLM MEMORIAL SCHOLARSHIP FUND (1901). By the Alumnae Association of Miss Chisholm's School, which Association reserves the privilege of precedence for such candidates as it may recommend. \$3,000.

MRS. HENRY CLARKE COE SCHOLARSHIP FUND (1910). By the National Society of New England Women, now the New York City Colony of the National Society. Awarded, on nomination of the Chairman of the Scholarship Committee of the New York City Colony, to a student from New England or of New England parentage. After the award is made the Society requires from the beneficiary full obedience to discipline and the highest ideals of scholarship. This may be awarded to an entering freshman. \$3,600.

CLASS OF 1919 DECENNIAL FUND (1929). A tenth reunion gift by the Class of 1919, for a resident student. \$5,000.

AUGUSTA SALIK DUBLIN SCHOLARSHIP FUND (1960). In memory of Augusta Salik Dublin '06, by her family and friends. Awarded at the discretion of the Committee on Financial Aid to a Barnard student, to enable her to continue her education in preparation for leadership in a field of social welfare, such as social work, social legislation, housing and city planning, or a related area. Available either to a student for undergraduate study or to a graduating student for graduate work, for one or more years. \$13,182.

EDUCATIONAL AND CULTURAL TRUST FUND OF THE ELECTRICAL INDUSTRY SCHOLARSHIPS (1951). By the major electrical contracting firms of New York City for sons and daughters of members of Local Union No. 3 of the International Brotherhood of Electrical Workers. Variable in number.

ENGLISH SCHOLARSHIP FUND (1920). By an anonymous donor. Awarded to a student of good standing who is specializing in English and is in need

of help; with the proviso that, if in any year there is no student specializing in English who is particularly deserving of aid, the scholarship may be used to assist a student majoring in some other subject. \$5,000.

GLADYS RENSHAW ESTERBROOK SCHOLARSHIP FUND (1958). In memory of her daughter, Gladys Renshaw Esterbrook '20, by bequest of Minnie R. Esterbrook. Preference is given to applicants majoring in English or French. \$5,000.

MARTHA T. FISKE SCHOLARSHIP FUND (1911). In memory of her sister, Mrs. Martha T. Fiske-Collord, by Anna E. Smith. Awarded to an applicant not a resident of New York City or its suburbs. \$5,000.

FOOD FAIR SCHOLARSHIP (1954). By the Food Fair Stores Foundation for employees and sons and daughters of employees of Food Fair Stores.

HELEN JENKINS GEER SCHOLARSHIP FUND (1940). In memory of her mother, Helen Jenkins Geer '15, by Helen Hartley Geer '40. Awarded annually, after conference with the donor. \$5,000.

VIRGINIA GILDERSLEEVE INTERNATIONAL SCHOLARSHIP FUND (1937). In honor of the international work of Dean Emeritus Gildersleeve, by Charles R. Crane. Awarded annually to a foreign student coming to Barnard to study. \$15,100.

VIRGINIA C. GILDERSLEEVE SCHOLARSHIP FUND (1968). In memory of Dean Emeritus Gildersleeve by the Class of 1923 on their forty-fifth reunion. Awarded to a student majoring in the humanities, with priority given to an English major. \$5,170.

EMMA HERTZOG SCHOLARSHIP FUND (1904). With gifts from residents of Yonkers, New York. Awarded in conference with the faculty of the Yonkers High School, to a graduate of that school. \$3,000.

MARION ALICE HOEY FUND (1944). In memory of Marion Alice Hoey '14, by Nellie Poorman. Preference is given to applicants studying Greek and Latin. \$2,000.

LILLIA BABBITT HYDE SCHOLARSHIP FUND (1953). By the Lillia Babbitt Hyde Foundation. Awarded to premedical students. \$25,000.

CHARLOTTE LOUISE JACKSON SCHOLARSHIP FUND (1928). In memory of Charlotte Louise Jackson, by bequest of her sister, Fannie A. Jackson. Awarded to a graduate of a Yonkers High School selected by or under the direction of the Board of Education of Yonkers. \$5,000.

MARY E. LARKIN JOLINE SCHOLARSHIP FUND (1927). By bequest of Mary E. Larkin Joline. Awarded to a student who is specializing in music. \$10,000.

WERNER JOSTEN SCHOLARSHIP FUND (1955). With a gift from Mrs. Werner Josten. Preference is given to a student majoring in music, but if in any year no such student is eligible, the scholarship may be awarded to a student majoring in some other field. \$25,916.

JESSIE KAUFMANN SCHOLARSHIP FUND (1902). In memory of his daughter, Jessie Kaufmann, by Julius Kaufmann. Awarded on the merits of entrance examinations to a student who, after careful investigation, is found to have no relative able to assist her financially. It may be held for the entire college course. \$4,000.

KIMBALL SCHOLARSHIP FUND (1938). By bequest of Lillian Emma Kimball. Awarded to a woman from Spain or one of the Spanish-American countries who shall pursue a year of graduate or undergraduate study at Barnard or elsewhere, under the direction of the Barnard Department of Spanish. \$32,883.

ELEANOR KINNICUTT SCHOLARSHIP FUND (1911). In memory of Mrs. Francis P. Kinnicutt, a Trustee of Barnard College. Awarded at the end of the freshman year to a student of exceptionally high standing. It may be held for three years, provided the recipient continues to maintain a high rank. \$5,000.

CAROLINA MARCIAL-DORADO SCHOLARSHIP FUND (1953). In memory of Professor Carolina Marcial-Dorado, for many years head of the Barnard College Department of Spanish. Awarded to a student from Spain, or to a Spanish major continuing graduate studies in the United States or abroad. If at any time there is no applicant eligible for the grant, it may at the discretion of the department be awarded to a student who is majoring in Spanish. \$15,378.

EUGENE F. AND MINNIE GOUGER MCGOWAN SCHOLARSHIP FUND (1955). By an anonymous donor. Preference is given to candidates from Mecklenburg County, North Carolina. If in any year no such candidate is eligible, the scholarship may be awarded to a student or students from other areas. \$10,000.

FANNIE MOULTON MCLANE SCHOLARSHIP FUND (1961). By bequest of Fannie Moulton McLane '07. Awarded for tuition to deserving students who are citizens of the United States of America, with preference given to those, if any, who satisfactorily establish that they are of Colonial or Revolutionary ancestry, or the descendants of a Civil War soldier. \$7,500.

MRS. DONALD MCLEAN SCHOLARSHIP FUND (1906). By the New York City Chapter of the Daughters of the American Revolution. Awarded, in conference with a representative of the Chapter, to a student who agrees to pursue the study of history (chiefly that of the United States) continuously throughout her college course. \$3,000.

FERRY STARR MORGAN SCHOLARSHIP FUND (1959). In memory of her father, by bequest of Grace B. Morgan '19. Awarded to a student who is majoring in music or philosophy. \$10,000.

LAWRENCE MORRIS SCHOLARSHIP FUND (1968). In memory of Lawrence Morris by his sister Mrs. Walter Sturges (Alice Morris '36) and other members of the family. Awarded annually with preference given to a nominee of the New York City Mission Society. \$11,590.

MARY BARSTOW POPE SCHOLARSHIP FUND (1913). In memory of Mary Barstow Pope, teacher in Miss Chapin's School, by her friends, her fellow teachers, and her pupils. Open to any undergraduate for the whole or part of her course, and awarded on the nomination of a self-perpetuating committee representing the founders. \$4,000.

PUBLIC SERVICE SCHOLARSHIP FUND (1934). By the Women's Organization for National Prohibition Reform. Awarded to young women of exceptional ability, interested in following a career of public service in the field of political science, who show special promise of future usefulness in the

public service. Awarded at the discretion of the Faculty of Barnard College to one or two students in their junior or senior years. In the case of a particularly promising student the Faculty may, at its discretion, extend the award to cover one, two, or three additional years of graduate study at an approved college or university in order to encourage young women of exceptional ability to complete a course of study which will fit them for service in public life. \$30,000.

LUCILLE PULITZER SCHOLARSHIP FUND (1899). In memory of his daughter, Lucille Pulitzer, by Joseph Pulitzer. Three are restricted to students from the City of New York; eight are for resident students. \$176,459.

AMELIA AGOSTINI DE DEL RIO SCHOLARSHIP FUND (1955). In honor of Amelia de del Rio, Chairman of the Department of Spanish from 1942 to 1962. Awarded to a student from Mrs. de del Rio's native island of Puerto Rico. If at any time there is no applicant from Puerto Rico eligible for the grant, it may, at the discretion of the department, be awarded to a student who is majoring in Spanish. \$21,333.

DR. HARRY ROSENSTEIN SCHOLARSHIP FUND (1967). In memory of Dr. Harry Rosenstein by his wife, Bertha Z. Rosenstein, and daughter, Gertrude L. Rosenstein '48. Awarded to a premedical student. \$5,000.

JOAN ROSOF SCHOLARSHIP FUND (1964). By Mr. Murray Rosof in honor of his daughter, Joan Rosof '61. Awarded to qualified students with the wish, but not the directive, that preference be given to his descendants or, in the absence thereof, to students from the State of New York. \$5,340.

FELIX ST. GEORGE SCHOLARSHIP (1955). In memory of her father, Felix St. George, by bequest of Ida St. George. Awarded to an incoming freshman whose subject of interest is a science or premedical course, more particularly physics, chemistry, or biology. \$7,455.

DOROTHY K. SCHEIDELL SCHOLARSHIP FUND (1965). In memory of Dr. Dorothy K. Scheidell '28, by her family, classmates, and friends. Awarded to a premedical student. If in any year no student qualifies for the award, it may be deferred until the following year. If no student qualifies over a three-year period, the accumulated income may be awarded to any able student with financial need. \$5,445.

LILLIAN SCHOEDLER SCHOLARSHIP FUND (1967). By bequest of Lillian Schoedler '11. Income and/or principal awarded to deserving students with financial need who have shown promise of qualities of leadership and/or potentialities for future civic or social usefulness. Awards preferably distributed in small amounts to many students. \$65,860.

FRED CURTIS SMITH MEMORIAL SCHOLARSHIP FUND (1955). In memory of Fred Curtis Smith, at the time of his death Vice President and Mortgage Officer of the Bowery Savings Bank. \$57,000.

HILDA STABER SCHOLARSHIP FUND (1967). By bequest of Hilda Staber '05. Awarded to foreign students of character and ability. \$25,000.

EMMA A. TILLOTSON SCHOLARSHIP FUND (1910). By Mrs. Luther G. Tillotson. Awarded at the end of the freshman year to a student of exceptionally high standing. It may be held for three years, provided the recipient continues to maintain a high rank. \$5,000.

CLARA BUTTENWIESER UNGER MEMORIAL FUND (1938). In memory of his daughter, Clara Buttenwieser Unger '13, by Joseph L. Buttenwieser. Awarded annually to assist through her senior year a student whose subject of major interest is government, and who shows promise of ability to contribute to the promotion and perpetuation of true democracy under our Constitution. \$2,500.

HELEN ELIZABETH VOSBURGH SCHOLARSHIP FUND (1934). In memory of Helen Elizabeth Vosburgh '25, by bequest of Katherine G. Lippke. Preference is given to a self-supporting student. \$5,000.

GERTIE EMILY GORMAN WEBB SCHOLARSHIP FUND (1953). By Charles Webb. Awarded to a student nominated by the Department of History. \$4,990.

ALMA GLUCK ZIMBALIST SCHOLARSHIP FUND (1940). By bequest of Alma Gluck Zimbalist. Awarded annually to a student who wishes to major in political science. \$10,000.

SCHOLARSHIPS—ESTABLISHED ON A TEMPORARY BASIS

BARNARD-IN-BROOKLYN CLUB SCHOLARSHIP (1944). A tuition scholarship, with variable stipend. Awarded annually, with preference given to a student from Brooklyn.

THE BARNARD COLLEGE CLUB OF DETROIT SCHOLARSHIP (1958). A tuition scholarship with variable stipend. Awarded annually, with preference given to a new student from Metropolitan Detroit.

FAIRFIELD COUNTY SCHOLARSHIP (1962). Awarded preferably to entering freshmen from Fairfield County for one year only.

ARLENE HERSHEY MEMORIAL SCHOLARSHIP (1964). A scholarship with variable stipend awarded annually to a senior in the Education Program.

HOLLAND DAMES SCHOLARSHIP (1915). In honor of Fanny I. Helmuth, by the Society of Daughters of Holland Dames. Awarded in conference with a representative of the Society to a student descended from the early Dutch settlers.

HELEN ROSE SCHEUER SCHOLARSHIP (1966). A \$2,000 scholarship awarded annually for five years. Given in honor of Helen Rose Scheuer '16, by her husband, Mr. S. H. Scheuer.

THRIFT SHOP SCHOLARSHIPS (1938). Awarded annually from the proceeds of the Barnard Scholarship Unit of Everybody's Thrift Shop, 330 East 59th Street, New York, N.Y. 10022.

XI. Honors

The following funds were established to honor those who have shown exceptional distinction in their chosen field of study. The income from these funds is awarded each year, unless otherwise stated.

GRADUATE FELLOWSHIPS

ASSOCIATE ALUMNAE OF BARNARD COLLEGE GRADUATE FELLOWSHIP (1963). To be awarded annually to a graduate who shows exceptional promise in her chosen field of work. \$43,000. Applications must be filed in the Alumnae Office by February 1.

GEORGE WELWOOD MURRAY GRADUATE FELLOWSHIP FUND (1930). By George Welwood Murray. Awarded as an academic honor to that member of the graduating class of Barnard College who, in the opinion of the Faculty, shows most promise of distinction in her chosen line of work in the field of the humanities and/or the social sciences. Should the recipient prove in no need of financial assistance, she may retain the title and honor but resign the income, which may then be used by the College for other fellowships or scholarships. Students who have graduated in February are eligible as well as those who are to graduate in June. The holder is to pursue a year of graduate study at Columbia or any other university or college of approved standing. \$20,000.

GRACE POTTER RICE FELLOWSHIP FUND (1935). In memory of his wife, Grace Potter Rice, Instructor and Assistant Professor of Chemistry at Barnard from 1918 to 1934, by Winthrop Merton Rice. Awarded as an academic honor to the member of the graduating class of Barnard College who, in the opinion of the Faculty, shows most promise of distinction in her chosen line of work. Should the recipient prove in no need of financial assistance, she may retain the title and honor but resign the income, which will then be used for other fellowships or scholarships. Students who have graduated in February are eligible, as well as those who are to graduate in June. The holder is to pursue a year of graduate study in the natural sciences or mathematics at Columbia or any other university or college of approved standing. \$24,000.

THE HERBERT MAULE RICHARDS FUND (1933). In memory of Professor Richards, a member of the Department of Botany from 1896 to 1928 and Chairman from 1897 to 1928, by the Barnard Botanical Club, former students, and friends. Granted from time to time to further botanical research, under the direction of an approved institution, to a student or an alumna of Barnard College. \$5,000.

ALPHA ZETA CLUB GRADUATE SCHOLARSHIP FUND (1936). By the Alpha Zeta Club, Inc. Awarded at the discretion of the Faculty as an academic honor to a member of the graduating class of Barnard College who, in their opinion, shows promise of distinction in her chosen line of work. It may also be awarded to an outstanding recent Barnard graduate who is a candidate for a higher degree. \$18,038.

WILLIAM MASON SCHOLARSHIP (1928). The William Mason Scholarship in music is awarded periodically on recommendation of the Department of

Music to a member of the graduating class of Barnard or Columbia College for graduate studies in music. An award of \$500.

MARGARET MEYER GRADUATE SCHOLARSHIP FUND (1952). In memory of Margaret Meyer Cohen '15, by bequest of Annie Nathan Meyer. Awarded to a student in the graduating class for instruction in secretarial work. \$3,000.

GRADUATE PRIZES

FRANK GILBERT BRYSON PRIZE (1931). In memory of Frank Gilbert Bryson, by bequest of Ella Fitzgerald Bryson '94. The President of the College shall fix the method of selecting a senior who, in the opinion of the class, has given conspicuous evidence of unselfishness and who has made the greatest contribution to Barnard during her college career. Income on \$3,000.

ANNE DAVIDSON PRIZE (1965). In honor of Anne Davidson by the R. W. Davidson family and friends. Awarded at the discretion of the Geology and Geography Department to a graduating senior who has demonstrated continuing interest in the study of Conservation, Natural Resources, or an allied field. The holder is to pursue a year's graduate study in one of these fields at Columbia or any other university of approved standing. Income on \$10,000.

DEAN PRIZE IN GERMAN (1925). By Edward D. Adams for the promotion of the study of German language and literature in Barnard College. Awarded to that member of the senior class who has throughout her course done the best work in German language and literature. Income on \$1,000.

CLARA L. FROELICH MATHEMATICS PRIZE (1962). By Clara L. Froelich '15. Awarded annually by the Department of Mathematics to a member of the graduating class whose work in mathematics has revealed superior ability in grasping the concepts of the subject and has been distinguished by thoughtful devotion to fundamental ideas rather than to the mere mastering of techniques. \$200.

KOHN MATHEMATICAL PRIZE (1892). By Mrs. S. H. Kohn. Awarded to a senior for excellence in mathematics. Competitors for this prize must have pursued mathematics continuously during their college course. Income on \$1,000.

UNDERGRADUATE AWARDS1

The income from prize funds is awarded each year.

ESTELLE M. ALLISON PRIZE FUND (1937). By bequest of Estelle M. Allison. Awarded to a student for excellence in literature. Income on \$1,001.

MARY E. ALLISON PRIZE FUND (1937). In memory of her mother, Mary E. Allison, by bequest of Estelle M. Allison. Awarded to a student for general excellence in scholarship. Income on \$1,001.

¹ Figures compiled as of January 1, 1970.

THE AMERICAN STATISTICAL ASSOCIATION PRIZE, NEW YORK AREA CHAPTER (1960). Awarded annually to the outstanding undergraduate student in statistics. A one-year student membership in the American Statistical Association and \$50.

EDNA HENRY BENNETT MEMORIAL FUND (1927). In memory of Edna Bennett '15, Lecturer in Zoology, by her friends. Awarded by the Department of Biology for work at a biological laboratory offering summer courses. Income on \$1,640.

BORDEN FRESHMAN PRIZE (1962). A prize of \$200 awarded to the freshman who carries a full academic program throughout the year and receives the highest average in her class. In the event of a tie it will be awarded to the student whose program was the heaviest. During the autumn immediately following, the winner will be announced and the prize awarded, regardless of whether or not she returns to Barnard. \$1,000 from the Borden Company Foundation.

EUGENE H. BYRNE HISTORY PRIZE FUND (1960). In memory of Eugene H. Byrne, Professor of History at Barnard College and Executive Officer of the Department from 1931 to 1949, by his wife, Janet M. Byrne, and friends. Awarded for superior work to an undergraduate majoring in history. Income on \$3,604.

HELEN MARIE CARLSON FRENCH PRIZE FUND (1965). In memory of Helen Marie Carlson by her family and friends. Awarded to the student who writes the best composition in third-year French (French 4), the course which Miss Carlson directed for many years, or a similar course at the discretion of a board of three judges chosen by the College and the donor.

THE COLUMBIA UNIVERSITY PRESS PRIZE. A copy of the Columbia Encyclopedia is awarded by the Columbia University Press to the member of the sophomore class who has done the best writing for Barnard Bulletin.

HELEN R. DOWNES PRIZE (1964). In honor of Professor Emeritus Helen R. Downes '14, Chairman of the Barnard College Department of Chemistry from 1945 to 1960, by former students and friends. Awarded at the end of her senior year to the student who, in the opinion of the Pre-Medical Committee, shows greatest promise of distinction in medicine or the medical sciences. Income on \$1,932.

THE JENNY A. GERARD MEDAL (1908). The Jenny A. Gerard Gold Medal, given by the Society of the Colonial Dames in America in memory of Mrs. James Gerard, late President of the Society, is awarded annually to the student who is most proficient in Colonial history.

GERMAN PRIZE FUND (1950). Awarded at the end of her junior year to an outstanding student majoring in German. In case the winner does not need scholarship help, the award shall be a prize of \$100 and the balance of the scholarship may be given to another able student majoring in German. If in any year no student qualifies for the award, it may be deferred and given to one or more qualified students at a later date. \$12,000.

KATHARINE REEVE GIRARD PRIZE (1964). In memory of Katharine Reeve Girard '33 by her husband, Professor Richard A. Girard, and her friends. Awarded by the Faculty Committee on Honors to a student whose interests are in the international aspects of the work in her major field. Income on \$955.

JULIUS S. HELD ART HISTORY PRIZE FUND (1969). Established by Virginia Bloedel Wright '51. Awarded to the most promising senior majoring in Art History. Income on \$1,520.

HERRMAN BOTANICAL PRIZE FUND (1892). Mrs. Esther Herrman. Awarded to the most proficient undergraduate student in biology. Income on \$1,000.

MEDAL OF THE HISPANIC INSTITUTE IN THE UNITED STATES. Awarded to an undergraduate for the best essay on Cervantes.

FREDERIC G. HOFFHERR FRENCH PRIZE FUND (1961). In memory of Frederic G. Hoffherr, Associate Professor of French from 1936 to 1955. Awarded annually to a student in Intermediate French (Course 3) for excellence in oral French. The prize is offered to encourage proficiency among students who are not themselves of French background. The winner is chosen on the basis of a contest sponsored by the French Department. Income on \$1,025.

THE ELIZABETH JANEWAY PRIZE FOR PROSE WRITING. A prize of \$500 awarded annually. Open to all undergraduates for a work of prose, whether fiction or non-fiction, which gives the greatest evidence of creative imagination and sustained ability. All undergraduates who intend to enter the prize competition must notify the Chairman of the English Department of their intention to do so by November 1, at which time they will receive detailed instructions as to the requirements. The final manuscripts must be submitted to the chairman by March 15. The prize will be given at the discretion of a board of three judges chosen by the College and the donor.

ELEANOR KELLER PRIZES (1968). By bequest of Marguerite Mespoulet, Professor Emeritus of French at Barnard College, in memory of Eleanor Keller, Professor of Chemistry at Barnard College. One prize, not exceeding \$1,000, to be awarded annually to a member of the junior class, not necessarily a French major, who has an outstanding record in courses of French literature offered by the department. Another prize, not exceeding \$1,000, to be awarded annually to a member of the senior class, not necessarily a French major, who has an outstanding record in courses concerned with French culture. \$43,517.

AMY LOVEMAN MEMORIAL FUND (1956). In memory of Amy Loveman '01, by her friends and classmates. First charge on the income shall be an annual prize of \$100 for the best original poem by a Barnard undergraduate. Terms of the competition will be announced later. The balance of the income shall be allocated to scholarships and shall be known as the Amy Loveman Scholarship. \$20,100.

THE LENORE MARSHALL PRIZES FOR WRITING (1960). For excellence in poetry and prose contributed to the undergraduate magazine. Adjudged by the donor, Mrs. Marshall, in consultation with the Department of English and the editors-in-chief, and awarded to promising young writers in need of financial aid. Two at \$50 each.

Miner '14, by bequest of Rosemary Alice C. Thomas. Awarded annually by the Department of English to the senior major who has shown distinction in the reading, writing, and study of poetry: the judges to be members of the Department of English. Income on \$5,000.

THE WILLIAM PEPPERELL MONTAGUE PRIZE FUND (1949). By William P. Montague, Lecturer, Instructor, and Professor of Philosophy at Barnard College

from 1903 to 1949. Awarded to a student of Barnard College who, in the opinion of the members of the Department of Philosophy, shows promise of distinction in the field of philosophy. Income on \$4,236.

PHOEBE MORRISON MEMORIAL PRIZE FUND (1969). Awarded upon recommendation of the Barnard College Political Science Department to a political science major planning to attend law school. Income on \$1,280.

THE HELEN PRINCE MEMORIAL PRIZE FUND (1921). In memory of his daughter, Helen C. Prince '22, by Julius Prince. Awarded to an undergraduate student for excellence in dramatic composition. Income on \$1,200.

KATHARINE E. PROVOST MEMORIAL PRIZE FUND (1949). In memory of Katharine E. Provost. Miss Provost was for twenty-three years Secretary and Assistant to the Controller of Barnard College and, at the time of her death, Superintendent of Buildings and Grounds. Awarded for superior work by an undergraduate major in economics. Income on \$1,000.

CAROLINE GALLUP REED PRIZE FUND (1916). In memory of her mother, Mrs. Sylvanus Reed, by Mrs. William Barclay Parsons for the recognition of outstanding work either in the field of the origin of Christianity and early church history or in the general field of the history and theory of religion. Awarded to the student who shows the highest excellence in one of these fields of work. The award is made partly on the basis of an essay to be handed in by April 1. Details regarding the scope of the essay may be obtained from the Department of Religion. Income on \$1,000.

MARIE REIMER SCHOLARSHIP FUND (1953). In honor of Professor Emeritus Marie Reimer, for many years Chairman of the Barnard College Department of Chemistry, by former students and friends. Awarded annually at the end of her junior year to an outstanding student majoring in chemistry. In case the winner does not need financial help, the award shall be a prize, the amount to be recommended by the Chemistry Department. The balance of the income shall be awarded by the Director of Financial Aid to an outstanding student at the end of her junior year who is majoring in chemistry and who has financial need. The students receiving financial aid from this fund shall be informed of the source of the award. \$5,035.

BETTINA BUONOCORE SALVO PRIZE FUND (1966). By bequest of Bettina Buonocore Salvo '16. Awarded annually to a deserving graduate or other student studying Italian, selected by the Department of Italian. Income on \$5,000.

SYLVIA KOPALD SELEKMAN PRIZE FUND (1960). In memory of Sylvia Kopald Selekman '20, by Janet Robb. Awarded by the Department of Economics to the freshman who is doing the best work in introductory economics. Income on \$1,000.

SPANISH PRIZE (1959). A prize of \$100 awarded annually to a Spanish major who, in the opinion of the Department, has done the most distinguished work in Spanish language and literature. \$2,500.

SPERANZA ITALIAN PRIZE FUND (1911). In memory of Carlo Leonardo Speranza, Instructor and Professor of Italian at Barnard College from 1890 to 1911, by a former student. Awarded to a student for excellence in Italian. Income on \$1,000.

STAINS-BERLE PRIZE FUND IN ANGLO-SAXON (1968). In memory of her grand-mothers, Caroline Foy Stains and Katharina Nohrherr Berle and in honor

of Professor Cabell Greet, by Katherine G. Stains '52. Awarded annually to an undergraduate student for excellence in Anglo-Saxon language and literature. Income on \$1,000.

JEAN WILLARD TATLOCK MEMORIAL PRIZE FUND (1917). In memory of Jean Willard Tatlock '95, by her friends. Awarded to the undergraduate student most proficient in Latin. Income on \$1,250.

ROSEMARY THOMAS PRIZE FUND IN FRENCH (1966). In honor of the poet Rosemary Thomas, by bequest of Helen Marie Carlson, a long-time member of the Barnard College French Department, awarded annually to the undergraduate student preferably, but not necessarily, a French major, who, in the opinion of the members of the Barnard College French Department, has shown the greatest evidence of a special sensitivity and awareness in her study of French poetic literature. Income on \$10,050.

von Wahl Prize (1915). In memory of Constance von Wahl, '12, President of the Undergraduate Association. Awarded to a student for excellence in biology, on the understanding that it is to be used to advance her knowledge in that field. If in any year no student stands out as eminently deserving of the prize, it is not awarded. Income on \$1,300.

The following prizes of Columbia University are by their terms open to students of Barnard College:

THE ACADEMY OF AMERICAN POETS PRIZE: A prize of \$100, established by the Academy of American Poets for the best poem or group of poems by a student. Awarded by the Department of English of Columbia University at the close of the Spring Term. Manuscripts should be submitted prior to April 1. For further information consult the Chairman of the Department of English and Comparative Literature of the University.

BENNETT PRIZE. A prize established through a gift of \$1,000 from James Gordon Bennett may be awarded by the Faculty of Political Science, with the approval of the Chairman of the Bennett Prize Committee, for the best essay upon some subject of contemporary interest in the domestic or foreign policy of the United States. The competition is open to students not holding a Bachelor's degree who pursue satisfactory courses in political science. Manuscripts should be submitted prior to the last day of classes of the Spring Term. For additional information consult Professor Joseph A. Rothschild.

THE BUNNER MEDAL. The H. C. Bunner Gold Medal, in memory of Henry Cuyler Bunner, is awarded at Commencement to the candidate for a Columbia degree who shall present the best essay on any topic dealing with American literature selected in connection with course or seminar work in American literature and approved by the Chairman of the Bunner Prize Committee. For additional information consult Professor Carl Hovde.

EARLE PRIZE IN CLASSICS. A prize of \$50, in memory of Mortimer Lamson Earle, Instructor in Greek in Barnard College from 1889 to 1895 and from 1898 to 1900 and Professor of Classical Philology from 1900 to 1905, is awarded to a candidate for the degree of Bachelor of Arts, for excellence in sight translation of passages of Greek and Latin. For further information consult Professor James A. Coulter.

THE CAROLINE PHELPS STOKES PRIZE. The Caroline Phelps Stokes Prize of about \$45 is awarded at Commencement to that student who has been a

degree candidate for at least one academic year in Columbia College or Barnard College and who has written the best essay on any topic approved by the Stokes Prize Committee, which has been presented in course or seminar work. Material should be submitted by January 1. For additional information consult Professor Joseph A. Rothschild.

VAN RENSSELAER PRIZE. To the candidate for a degree in Columbia University who is the author of the best example of English lyric verse. Material must be submitted by April 1. Applicants should submit not more than three poems of their own choice, aggregating not more than twenty pages. Income of the Marianna Griswold Van Rensselaer Fund, about \$50. For additional details consult the Department of English and Comparative Literature.

WOODBERRY PRIZE. Established by the Woodberry Society as a memorial to George Edward Woodberry. Awarded every second year to an undergraduate student of the University for the best original poem. Material must be submitted by April 1. Applicants should submit not more than three poems of their own choice, aggregating not more than twenty pages, unless a single poem is submitted in excess of that amount. If, in the opinion of the committee of judges, no poem submitted in any prize year is worthy of this award, the prize will not be given. Awarded in 1969-70. Value of prize about \$100. For additional details consult the Chairman of the Department of English and Comparative Literature.

The following prize is also open to Barnard students:

SUSAN HUNTINGTON VERNON PRIZE. A prize of about \$25, the annual income of the fund established in 1941 by pupils and friends of Mrs. Vernon, in tribute to her work at the Hispanic Institute, and augmented by her in 1943. The prize is awarded, on recommendation of the Chairman of the Department of Spanish, for the best original essay written in Spanish by a senior whose native language is not Spanish, but who is taking language courses at Barnard, Mount Holyoke, Radcliffe, Smith, Vassar, or Wellesley.

XII. Associate Alumnae of Barnard College

The Associate Alumnae of Barnard College is made up of fifteen thousand members from all states of the Union and more than sixty foreign countries. The Associate Alumnae serve the College in three important ways: by interpreting Barnard to the community; by keeping local secondary school students informed about Barnard; and by aiding in the support of the College.

The Alumnae Association functions through a group of officers, directors, and alumnae trustees elected by members of the Association. The central office of the Associate Alumnae is in Milbank Hall.

Barnard College Clubs, the Alumnae Council with nationwide membership, and a group of qualified and authorized alumnae make it possible to find spokesmen for Barnard at distances far from New York. Students who are considering Barnard may find it helpful to talk personally with the Barnard Area Representative living nearest them. A list of these representatives as well as officers of the Associate Alumnae is given below.

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CONNECTICUT

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- Mrs. Sheldon Isakoff

R.D. 1, Box 361, Center Mill Road, 19317

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Washington

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4735 Butterworth Place, N.W., 20016

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XIII. Statistics 1

DEGREES CONFERRED: A.B. B.S. (1909-1918) A.M. (1898-1900) Ph.D. (1899-1900)	TOTAL REGISTRATION	GRADUATE STUDENTS (1890-1900)		(1896-1904, 1914-1915)	SPECIAL STUDENTS: Matriculated		Undergraduates, Regular: Seniors Juniors Sophomores Freshmen Unclassified students	
	36	:	22		22	14		1889 to 1890
39 18 1	315	82	62	41	21	171		1899 to 1900
88	5.35	:	54		24	481	109 1188	1909 to 1910
141	733		69	رب د	. 32	664	123 110 191 240	1914 to 1915
139	755		61	•	39	694	87 190 193 224	1919 to 1920
198	980	:	33	:	: : : : : : : : : : : : : : : : : : : :	947	126 259 234 271	1924 to 1925
247	1104		28	:		1076	227 237 247 311	1929 to 1930
221	1026		29	•	29	997	181 220 226 267 103	1934 :-to 1935
206	985		31	•	:	954	164 191 210 246 143	1939 to 1940
270	1237	:	21	•		1216	208 314 314 324 56	1944 to 1945
303	1112		15	•	: :: : :::::::::::::::::::::::::::::::	1097	260 277 272 272 271	1949 to 1950
258	1227	•	20	•	20	1207	245 340 317 304	1954 to 1955
391	1695	•	11	•	• • • • • • • • • • • • • • • • • • •	1684	375 394 447 454	1965 to 1966
395	1835	•	11	:	: : : : : : : : : : : : : : : : : : : :	1824	361 475 504 459 25	1966 to 1967
45	1935	•	21	:	21	1914	437 475 457 23	1967 to 1968
502	1989	•	27	:	27	1962	420 568 493 458 23	1968 to 1969
	1958		22	•	22	1936	433 480 517 485 21	1969 to 1970

† These figures represent registration in the Autumn Term plus students admitted in the Spring Term. TOTAL BACHELOR'S DEGREES CONFERRED 1893-1969: A.B., 15,781, B.S., 77.

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XIV. Examination Groups

Group (1) M W F 9
Art History 97, 98
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Chemistry 2
Economics 17, 18
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German 1y
German 2x
History 11
History 12 (I)
Philosophy 1x (I)

Group (2) M W F 10

Art History 51, 52 Art History 81, 82 Art History 86 Chemistry 51; 54 Economics 1; 2 (I) French 20 (II) French 25-26 French 37 German 7-8 History 17; 18 History 51; 52 Mathematics 7, 8 Philosophy 1x, 1y (II) Philosophy 35; 36 Political Science 15y Political Science 23 Psychology 12 Psychology 21 Sociology 33 Sociology 36 Spanish 11 Spanish 13 Spanish 26

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Biology 13 Chemistry 41, 42 Chemistry 59 English 52 English 63, 64 French 12 French 20 (III) French 35 French 48 German 4x German 36 History 19; 20 History 57 Latin 1-2
Latin 33
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Spanish 5; 6
Spanish 22
Spanish 25

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Group (7) Tu Th 10:35-11:50 Art History 70

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Spanish 14 Spanish 17

Group (8) Tu Th 11

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Group (11)

Psychology 1x or 1y (Sections)

Group (12)
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French 20x (I)
Music 1-2 (II)
Philosophy 1x; 1y (V)

Group (13)

Art History 61 Art History 84 Art History 94 English 84 Geography 34 Medieval & Renaissance Studies 13, 14 Sociology 42

Group (14)

French 1-2 (Sections)
French 2x (Sections)
French 3; 3y (Sections)
French 4; 4x (Sections)
French 21-22 (Sections)

Group (15)

German 1-2 (Sections) German 3, 4 (Sections)

Group (16)

Russian 1-2 (Sections) Russian 3-4 (Sections) Spanish 1-2 (Sections) Spanish 3; 4 (Sections)

Group (17) History 63

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Group (0)

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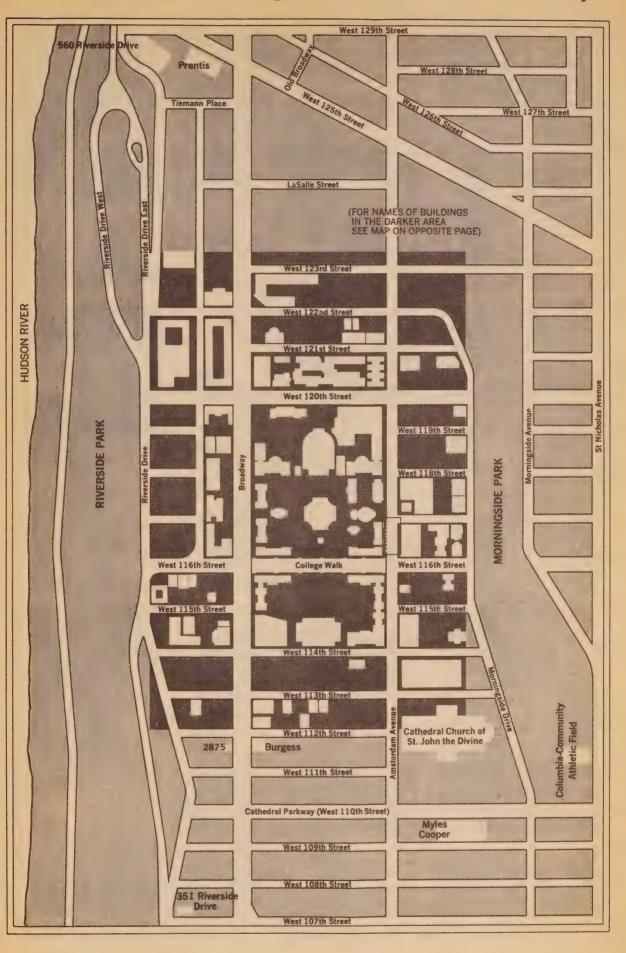
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BEQUEST FORM

General
I,, give and bequeath to Barnard College
in the City of New York the sum of for the
uses and purposes of the said Corporation.
Endowment
I,, give and bequeath to Barnard College
in the City of New York the sum of to be added
to the General Endowment of the said Corporation.
For a Specific Purpose
I,, give and bequeath to Barnard College
in the City of New York the sum of to be used
for the purposes of
•••••
to be known as the Fund. If at any time in
the judgment of the Trustees of the said Corporation, the need of income for
such purposes no longer exists, the Trustees of the said Corporation shall be,
and hereby are, authorized to use the income from the Fund for such pur-
poses as shall in their judgment promote the interests of the College.

The Morningside Heights Area of New York City



The Morningside Campus & Environs

